Faculty of Education

Curriculum dissemination in TAFE

A study of the educational change process in the Technical and Further Education sector in Western Australia

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Abstract

This research was concerned with identifying and finding solutions to serious dissemination problems existing in the curriculum change process in the Technical and Further Education (TAFE) sector in Western Australia. It explored the hypothesis that much of the frustration and inefficiency which occurs when TAFE courses are reviewed or upgraded can be eradicated by attention given to a well developed dissemination strategy.

The research focused initially on four case studies of TAFE curriculum innovation and on the identification of the dissemination factors which the implementers believe affected them most. The difference between the ideal dissemination factors and the actual situation then was measured, and those considered most important in the dissemination process were identified. The findings then were brought together into a new dissemination strategy which was tested in the field with a newly accredited TAFE course.

Three stages of research are reported. In the first stage, data for the case studies were collected through semi-structured interviews and then analysed to provide information for a questionnaire survey. The second stage, the survey, used a preferred and actual situation questionnaire, administered to 100 TAFE lecturers to gather measurable data on the factors affecting dissemination. Third, a dissemination strategy, consisting of tactics derived from the survey, the literature and from Curriculum Services staff, was put into place with the new Certificate of Horticultural Skills and its progress was observed and analysed as it affected the lecturers in the horticulture study area.

The conclusions point to the importance of lecturer collaboration in the process of change and the need for TAFE administrators to employ a trained ‘change agent’ to encourage the development of teacher meaning and ownership. Shared development of teaching materials needs to be part of the change process. The existing ‘top-down’

mandated curriculum change process needs to exist alongside a ‘bottom-up’ involvement of lecturers, and change must be seen as a shared exercise between administrators and lecturers. It is recommended that the strategy evolved in this thesis be adopted for further TAFE curriculum projects and that it be evaluated and modified for universal application in the TAFE curriculum change process.

Chapter 1

The problem

The question of how new ideas and practices spread from their point of origin and gain widespread adoption is central to any system of planned change ...
(MacDonald & Walker, 1976, p.4)

Curriculum dissemination and TAFE

The output of formal curriculum development within the Technical and Further Education (TAFE) sector exceeds that of any other sector of education in Australia. One and a quarter million students are enrolled in over 30,000 different subjects at any one time. These subjects are being constantly revised and updated according to rapidly changing industrial, technological and political demand. Curriculum development and implementation is virtually a continuous process and all TAFE teachers are affected by it. Parts of this process have become quite sophisticated as a growing band of curriculum developers has become experienced in occupational analysis, course review and the design and the development of curriculum materials.

In this array of practices, however, dissemination as part of the formal procedure appears to be relatively neglected. This can be explained partly by the fact that TAFE study areas provide largely captive markets and lecturers have little choice but to accept and implement curriculum change. When a TAFE curriculum product is accredited and funded, it is implemented, whether lecturers understand and accept it or not. The assessment system sees to that. Dissemination has never been considered officially as a problem, and specific funds, time or management systems are rarely devoted to its successful accomplishment. Also, in times of budget tightening, financial efficiency is often interpreted as cost cutting in immediate and high profile activities, such as staff development and skills upgrading. Thus, in spite of evidence that effective dissemination saves costs in the long term, the lessons from research are ignored. There is a general belief, moreover, that the research on curriculum change, largely schools related and coming from North America and the United Kingdom, is

not directly applicable to the TAFE situation. Furthermore, no serious study of the curriculum dissemination process has been undertaken in the TAFE sector in Australia.

It is not difficult to find people in the TAFE system who believe that attention should be given to this important part of the curriculum change process. Curriculum officers in the Western Australian Department of Training (the government Authority which administers the TAFE sector) have been aware of this research project since its inception a number of years ago, and some have participated in the various stages and read and commented on the results. These officers are aware of the importance of dissemination in the curriculum process, have spoken about a need for some basic reform, and appear anxious to do something about it. Dissemination, however, remains a problem and no person, or group of people, appear to be empowered to do very much about it, especially in the current climate of restructuring. Meanwhile, lecturers in the colleges are subjected to unnecessary difficulty and stress whenever the curriculum in their teaching area undergoes upgrading or change.

The idea for this research came initially from the TAFE lecturers in undergraduate and graduate in-service classes studying curriculum design and development at Curtin University of Technology. It was a common reaction year after year for TAFE lecturers in these classes to express surprise that there already existed a body of knowledge and research about dissemination, diffusion and implementation. “Why don't they pay attention to these things in our curriculum areas?”, they wanted to know. “How can there be such conclusive evidence of the importance of dissemination in the curriculum process, which is ignored completely in our TAFE system?”

The language of curriculum dissemination, diffusion and implementation suddenly gave student-lecturers a vocabulary with which to describe their frustration as teachers trying to use new curriculum materials which they couldn't understand, didn’t agree with, or didn't accept. In classroom discussion and in subsequent assignments, some of

the student-lecturers began exploring the difficulties that they felt they had inherited from poorly disseminated curricula. Some of them used their curriculum assignments to rewrite parts of subjects or courses which they found unsatisfactory, to evaluate them or to subject them to a training needs analysis. Their projects indicated that, some of them at least, felt that there had been some sort of gap in the curriculum development process, and that by doing something extra for themselves they were increasing their ownership of and involvement in the subjects which they had to teach.

It is very easy when you are a student-lecturer at the bottom of the career ladder to criticise your senior officers and administrators and accuse them of not knowing what they are doing. In some cases, however, the student-lecturers might have been right. The greater majority of the Study Area Leaders, senior lecturers and even some curriculum officers have not had formal training in curriculum theory and practice. Until recently, a content expert, perhaps an experienced lecturer or administrator, might have undertaken the rewriting of a whole course by himself or herself, maybe with little consultation with colleagues or teaching staff. Sometimes a small team of senior people in a study area became involved in curriculum development, but went out of their way to keep the fact secret, resisting all efforts by other staff to find out what was going on. Others had to develop curriculum materials in such a rush that they had no time to involve others, or they might have rejected offers of help or participation from colleagues working in the same area of teaching (personal communication, 1988-91). Such stories mark the early stages of teacher frustration and disempowerment which so often come to a head at the time when a new curriculum project has to be implemented.

As student-lecturers unfolded these and similar stories, it became apparent that being excluded from the development process and then having to implement courses and subjects which didn't always make sense to them, might have been one of the most frustrating things about their jobs. Not only did they lack a sense of ownership, essential to teachers trying to interpret a subject with their own flavour, or meaning, but at times they claimed the course was ‘out of date’, ‘out of touch’, wrongly

sequenced or structured, impossible to teach, impossible to assess, or just not what industry wanted from TAFE training. If even half of these criticisms were true, it would mark a serious deficiency in the curriculum development expertise which the TAFE system claims to have been getting right for most of the past decade. While it is likely that some of the deficiency lies in the design and development of new courses, it is probable that most of the frustration was caused by ineffective, or non-existent, dissemination and diffusion of the new curriculum products to the users.

This study was undertaken with the aim of finding out what truth lay in the observations of the student-lecturers and how the alleged problems in the curriculum dissemination process could be overcome.

Chapter 1 describes the problems surrounding curriculum dissemination in TAFE in detail. First, it sets out the rationale for the study, justifying its need and linking some of the problems described in the literature with the unique conditions in TAFE. Second, it develops a definition of dissemination, specific to the TAFE context, to be used in this study. Third, the political context and culture of the TAFE sector are described, as these make up the environment which gives personal meaning to lecturers who have to cope with the change process. Fourth, this is followed by a description of the differences between the change environments of schools and TAFE, in order to emphasise that dissemination is a relatively unknown concept in TAFE and poses new challenges for research. Finally, the research questions to be answered in the study are delineated and the structure of the thesis outlined.

Rationale for the study

As TAFE lecturers and curriculum officers become more aware of the shortfalls of curriculum change practices, the more important it becomes that a thorough study and analysis be made of the existing situation, and that improved processes be developed for the future.

The research literature highlights the issues and problems of dissemination, and the change process in general, in the primary and secondary school sectors, mainly in the UK, the USA and Canada. The main problem was identified early in the 1970s (Fullan 1972; Gross, Giacquinta & Bernstein, 1971; MacDonald & Rudduck, 1971; Owen, 1973; Smith & Keith, 1971) as something missing in the curriculum change process and resulting in widespread misuse or disuse of curriculum materials in schools. Researchers began looking for the reasons for this and came up with a variety of individual, organisational and communication factors thought to be important for the success or failure of dissemination of new curriculum products (see Chapter 2).

Neither the basic problem nor the directions for improvement mentioned in the literature are easily applicable to curriculum dissemination in the Australian TAFE context. Some of the issues are highly relevant, but there are significant differences, and many local factors.

One major difference is the assessment system, sometimes internal and sometimes by State wide examination, affecting all TAFE Award courses. Innovation, once adopted by a study area, becomes assessable, usually in the same semester. The pressure is intense as lecturers attempt to put changes into practice as quickly as possible, so that their students will not be penalised. The emphasis on examinations is about to change with the implementation of the new competency based training policy throughout TAFE in all Australian States. Competency based assessment may reduce examination pressure, but will not reduce the urgency to get new courses up and running as quickly as possible.

Differences also exist in the length of time for which an innovation might remain current. Most accredited TAFE courses have a five-year life span, followed by further revision and updating. A further difference is that there is now very little college based control of development, except in the sense of the development of teaching materials. The change model is a centralist one, with dissemination strategies needed to carry the innovation to users in city and rural colleges. Loucks and Lieberman (1983)

would describe it as a technological model, typical of administrations which adopt programs and assume they will be implemented immediately.

A problem is known to exist with the curriculum dissemination process in TAFE, but its features are recognisably different from those described in much of the research literature. The questions need to be studied and analysed afresh in the TAFE context.

Cuban (1992) discussed the contradiction between curriculum reform and the inertia of the school. The TAFE system also suffers from the inertia of large institutions, and in many ways is as resistant to change as the schools sector. However, TAFE also has in its philosophy the belief that it must respond quickly and efficiently to the changing demands of the work place. This is an oft repeated message in its communication with business and industry, and the fact that it is often not efficient or fast enough is criticised and deplored by senior management, and increased efforts are put into making the process more in line with the expectations and practice of the commercial and industrial world.

Cuban discussed the different cultural levels of school environments, and challenged the assumption that change affecting one level automatically affects the others (p.217). The policy of quick and efficient response to industry requirements is important to the senior management level of TAFE. It is one of their most important objectives, and is entrenched in their mission statements. However, in the colleges, the objectives of lecturing staff can be distinctly different from those of senior staff involved in annual budgeting, policy planning, and responding to State and Federal government directives and short term industry demands. Lecturers, by virtue of their experience and training, are more concerned with long term objectives, the stability of knowledge and values and, to some extent, with suspicion of the economic whims and ambitions of industry. Although they accept curriculum change as inevitable, and even desirable, they are aware that “fads do occur repeatedly in educational history” (Cuban, 1992, p.221) and that educational institutions must represent substantiality and avoid the insecurities of frequent disruption. They accommodate change ambiguously, as Cuban wrote,

preferring small incremental steps tested along the way, rather than rapid fundamental change. This occurs even though TAFE lecturers invariably are drawn from industry in the first place.

With more detailed knowledge of the issues which are important in the TAFE context, and of the factors affecting the level of the success of dissemination, it was considered important to identify those factors which are most likely to lead to success and those which should be countered. With knowledge of both positive and negative factors, it was planned to derive an ideal process, or strategy, of curriculum dissemination which could be adopted as part of the overall development process. The strategy then needed to be tested and validated and adaptations made as necessary. It was believed that, put into practice, such a strategy would help teachers to understand and accept new curriculum products more easily and, consequently, reduce personal stress and conflict, energy-consuming emotion and related time-wasting. The effect of this would be the enhancement of the curriculum change process. It would assist TAFE lecturers to perform better the jobs which they are employed to do, undistracted by the emotional and professional threats currently involved in change.

Thus this research can be justified from the point of view of increasing knowledge about curriculum change specifically in the TAFE context, as well as that of improving the dissemination process in TAFE and thereby increasing the efficiency of its educative role.

Defining dissemination

The term dissemination has not been constant in concept or definition in curriculum writing during the past three decades. In the sixties, the words ‘diffusion’ and ‘dissemination’ were used outside education, in relation to the spread of new ideas from source to user, or from user to user (Havelock, 1969). Both words were used in relation to educational change in the early 1970s, but by the end of that decade the term ‘dissemination’ had virtually supplanted ‘diffusion’ and the concept had subtly

changed to include planned marketing and staff development strategies. Diffusion, on the other hand, now normally refers to unplanned change.

During the eighties the term ‘dissemination’ itself lost popularity as a separate issue in the research literature, being seen as a series of planned techniques, or strategies, under the umbrella term ‘educational change’, which concentrated more on stages, or phases, such as ‘initiation’, ‘mobilisation’, ‘adoption’, ‘implementation’ and ‘institutionalisation’ (Berman & McLaughlin, 1978; Fullan, 1982; 1991; Miles, 1987). A more detailed discussion of the definition of ‘dissemination’, based on the literature, can be found in Chapter 2.

In spite of the changes in terminology witnessed in mainstream literature, however, dissemination still remains a real problem according to the evidence outlined earlier. The problem certainly hasn’t gone away. For the purpose of this study, curriculum dissemination is defined as the process of *informing* teachers about new or revised curriculum ideas, documents or materials, so that they *understand* and *accept* the innovation. This includes something of the concepts of both dissemination and diffusion. It includes a top-down, administration perspective as well as the concept of the transfer of meaning and teacher collaboration in the process. These concepts are explained and expanded in the next chapter.

It is not easy to separate dissemination as a separate part of the curriculum process. It is not defined as a phase, or stage, but as a series of planned techniques, or tactics, affecting several phases (see Figures 2.1 and 2.2 in the next chapter). It is a process which, like formative evaluation, can reach across a number of other parts of the curriculum change process. The hardest stages to separate from each other are those associated with initiating, adopting and using the innovation. A discussion of the meanings of these terms is included in Chapter 2.

We might think of *understanding* and *accepting* as normally occurring before implementing, but the boundaries between adoption and implementation become

blurred in the sense that often we cannot ascertain whether the innovation has been understood and accepted until we see it being implemented. Sometimes the lecturer accepts the innovation, and tries to put it into practice without fully understanding it. In this situation, as the lecturer tries out the innovation, discusses it with fellow lecturers, participates in staff meetings, reads and rereads the documentation and experiments further, implementation becomes indistinguishable from the dissemination or diffusion process. Or a lecturer might say that he or she understands and accepts it, but in fact has not grasped the deeper meaning of the change. This would not be known until implementation had started. Lecturers' response to, or their opinion of, dissemination is difficult to judge without looking also at implementation. Lecturers can always talk more easily about their troubles or successes in implementing a curriculum product than they can about how they learned about, understood or accepted it. In some cases, they would not be aware that dissemination had taken place unless they could see it as a planned discrete process. Accidental dissemination, or diffusion in the accepted sense of the word, might pass by unnoticed.

The concepts of user participation in the design and development stage, staff support, materials development, the nature and complexity of the innovation, and the cultural meaning which lecturers derive from it introduce further areas of overlap, where dissemination techniques defined in the research literature are virtually the same strategies identified as those leading to successful implementation (see Chapter 2 for factors defined by Crandall *et al.*, 1983; Fullan, 1982 & 1991; Fullan & Pomfret, 1977; Huberman & Miles, 1982; Kennedy 1985; Miles, Saxl & Lieberman, l988). Lecturers involved in implementation tend not to see a clear distinction among the factors involved in planning for implementation and factors affecting the actual implementation.

Thus it was desirable to define the concept broadly, as indicated on page 8, and to look at all the phases through which dissemination might be in operation, such as orientation, initiation and implementation, as well as at the dissemination phenomenon

itself. The definition used for the purposes of this study is discussed further in Chapter 2, with reference to the curriculum research literature.

Because curriculum dissemination and the change process in general are influenced by both administrative and user perspectives, it is necessary to examine the political and philosophical environments which give personal meaning to those involved in it. The next section looks at the historical, political, philosophical and cultural systems which affect the thinking and behaviour of TAFE personnel involved in curriculum change.

Political influences on curriculum change processes in TAFE

It is possible that the problem of ineffective dissemination is relatively new in the TAFE system. Funnell (1993) wrote of significant changes in the division of labour and role clarity occurring in the TAFE sector with the introduction in the early 1990s of State and federal level restructuring in response to the Hawke Labor government's new corporate management directives. This occurred in reply to industry restructuring in the late 1980s. Restructuring, Funnell wrote, "involves the deregulation of production and service into more market-driven delivery processes ... a leaner head office and college managerial structures ... [and] tasks which were once done in the central bureaucracy and through former lines of management are spread throughout the system" (p.2).

> A restructure substantially alters an existing division of labour. It creates ... a 'betwixt and between' state where emerging and established authority and power relationships come into conflict. Both of these aspects of restructuring have a personal and emotional impact on the lives of those whose work situations are changed (Funnell, 1993, p.2).

Funnell referred to three stages in the politics and philosophy of TAFE. Until the early 1980s, there had existed the traditional TAFE 'cardigan set' consisting of "primarily tradesmen who were giving their bit back to the trade by passing their knowledge and expertise to the next generation". The 1980s saw the emergence of a second stage

which he called the ‘new TAFE’, characterised by “younger, more educationally qualified staff [and] teachers faced with new student groups”. The third stage, which Funnell referred to as the ‘new corporatism’ began in the early 1990s.

The ‘new TAFE’ stage was defined as that coinciding with TAFE expansion into:

> ... access and equity ... computing, health and recreation, fashion, child studies and welfare ... opportunities given to gain knowledge, redress social disadvantage, [and] carry out important and responsible tasks ... such as the implementation of new courses (p.2).

McDonald *et al* (1993) wrote of the place of the subject Superintendents under Western Australia's Education Department in the 1970s and 1980s. In their paternalistic roles, they spread new knowledge and new curricula to teaching staff in the schools, listened to their feedback, and acted as mediators between the Departmental bureaucracy and the implementers in the schools. The Superintendent was “in every sense a friend who could provide help when needed and a means through which centrally designed curricula could be disseminated” (p.21).

This was also the pattern in Western Australia's TAFE colleges in the 1970s and early 1980s, when the old Technical Education Division was part of the Education Department. The curriculum change process in practice in the Technical Education Division in the 1970s included relatively successful dissemination, because of the ‘paternalism’ of the subject Superintendents, the fact that they visited the colleges regularly and knew all the teachers by name, kept in touch with industry, and acted as sorters and mediators between teachers, the Department and industry. Curriculum change at that time undoubtedly was slower and less complex as well.

A similar phenomenon has been identified by Dunning in the UK (1993). The decentralised change processes of the 1960s and 70s have been described more as piecemeal ‘routine maintenance’ rather than actual reform. The 1980s, by contrast, saw government policy significantly oriented towards change with the introduction of

the General Certificate of Secondary Education, the Technical and Vocational Education Initiative and, more recently, the National Curriculum (Dunning, 1993, p.38). Dunning's study challenged the contention that genuine reform can only take place within the framework of public education policy. On the other hand, her work indicated that reform which works well at a local level may not produce change of any real significance on a wider scale (Dunning, 1993).

It can be argued that curriculum dissemination became a problem, nationally, with the transition to the 'new TAFE' profile of the 1980s, and, before the problem had had time to become recognised and diagnosed, its symptoms were exacerbated and worsened by the subsequent change to what Funnell called the 'new corporatism' in the 1990s and the current wave of restructuring and reform.

When the problem of curriculum dissemination in Western Australia's TAFE system first came to the attention of the researcher in the late 1980s, the 'new TAFE' expansion had occurred in WA and 'new corporatism', was just around the corner. The Technical Education Division had become the Department of TAFE and corporate strategies were just beginning to affect the thinking of TAFE management. In January 1992, the Department of TAFE was absorbed with the Department of Employment and Training to become DEVET (Department of Employment, Vocational Education and Training), and in late 1993 DEVET and SESDA (the State Employment Skills Development Authority) were amalgamated into the Western Australian Department of Training. In line with policies of corporate managerialism, a chief executive officer was recruited from outside the organisation, and fast track promotion for staff with corporate managerial experience, and devolution of autonomy and responsibility to college, or cluster, level were introduced between 1990 and 1993, just as Funnell (1993) described had happened in Queensland. Difficulties in the curriculum change process, and the neglect of dissemination, first became a problem with the growth of TAFE which occurred in the 1980s, when rapid expansion of para-professional courses, staff numbers, and the development of the concept of technical and further education

(as distinct from apprenticeship training), increased the pace and demand for new course development. Little enough attention was paid to the importance of dissemination in the schools sector at that time, let alone in the TAFE sector, where the role of curriculum development was only just emerging and the first trained professional curriculum developers were just being appointed (McBeath, 1991, pp.1-2).

During the 1980s, curriculum change theories were being introduced into teacher training courses for TAFE lecturers and TAFE curriculum officers were beginning to take an interest in change as a phenomenon. By the end of the decade, the pilot study described in Chapter 4 of this report had begun in Western Australia and the findings were made available to the staff of what was at that time called the TAFE Curriculum Research and Development Branch. Evidence of a changed awareness had just surfaced in the thinking of curriculum officers, when the new initiatives referred to as 'new corporatism' descended on them, demanding that all their energies and attention be diverted into rewriting hundreds of existing courses in competency based, modularised format according to the new Australian Committee for Training Curriculum (ACTRAC, 1992) guidelines.

During the 1980s, a curriculum 'contract' system was introduced into TAFE in Western Australia. This required plans for new curriculum development or revision to be signed by the Director of TAFE, so that funds, equipment and resources were committed before development began. This contract did not refer specifically to staff development, or to the production of teaching materials, but it was a significant administrative reform which could have raised awareness within the system of the importance of dissemination and some of the fundamental factors for its success. However, somewhere among the restructuring processes of the late 1980s and early 1990s, this reform appears to have died a quiet death, absorbed in barely recognisable terms into the duty statements of the new Assistant Directors (Academic) in the colleges. The chance to get things right under the 'new TAFE' system had been lost, and the new corporate system was upon us, demanding different priorities and new energies.

In the same way as the reforms of the 1980s had changed the roles of the Superintendents, so too the new corporatism changed the roles of Study Area Leaders and senior lecturers, and Heads of Department disappeared altogether.

Study Area Leaders might have been seen as playing a curriculum development and networking role when they were first appointed to assist the Superintendents in 1983. Nowadays they are responsible to the less powerful Assistant Directors (Academic), who have broad responsibility for course related matters in a number of areas, while the Study Area Leaders have teaching experience and detailed understanding of a specific area of study. Their roles, however, have never been clear. Time allocation to Study Area Leaders' duties range from one to ten hours a week. They are not paid a responsibility allowance, and networking across colleges has never been well resourced. Now that the autonomous colleges are being set up, the future of the Study Area Leaders is uncertain. Their networking role across colleges does not fit neatly into the proposed new management structure, and it is not likely that the autonomous colleges will be interested in providing resources for cooperative, State-wide staff development, dissemination or shared discussion of curriculum implementation issues.

Senior lecturers in smaller colleges had to some extent picked up the intermediary role of the Superintendents, filtering and interpreting new knowledge to their staff on a college level, and articulating staff concerns up the line of management to the senior officers in the bureaucracy. The new corporate image of the 1990s, however, changed the role of senior lecturers to that of middle managers, increasing their administrative responsibilities, refocussing their loyalties and virtually removing them from the classroom and day-to-day contact with lecturers. Lecturing staff are probably more isolated nowadays than ever before, and one of the consequences of the neglect of effective dissemination processes is that they are becoming even more isolated.

Since the original delineation of this research, new vocational education and training curriculum procedures have been introduced nationally, in response to the new

National Training Board (NTB) and, later, to the Australian Committee for Training Curriculum (ACTRAC) and the Australian National Training Authority (ANTA). In Western Australia, the State Employment and Skills Development Authority (SESDA) was established by Act of Parliament in 1991 to coordinate and accredit all award industry training programs. SESDA, the Skills Standards and Accreditation Board (SSAB) and 23 new tripartite Industry Employment and Training Councils (IETCs) responsible to SESDA ostensibly took over the training curriculum development process which had been controlled until the early 1990s by TAFE.

SESDA, SSAB and the IETCs were closely influenced by the NTB and ACTRAC, which in turn was funded by the national Vocational Employment, Education and Training Advisory Committee (VEETAC). Since late 1993, the Australian National Training Authority (ANTA) has taken over the role of VEETAC, and SESDA has been absorbed into the new Western Australian Department of Training, although at the time of writing, there has not been any further change in the official guidelines for curriculum development.

National curriculum guidelines were devised and revised (ACTRAC, 1992 & 1994), concentrating on the need for national skills standards, recognition of industry and award restructuring, recognition of prior learning, equity and access, flexibility of training delivery and competency based modular program development. Accreditation criteria have been defined as evidence of industry support, and include competency based subject and course design, appropriate assessment methods, credit transfer, flexibility of learning, elimination of barriers to access and equity, customisation, quality of staff and training facilities, strategies for monitoring and evaluating courses, and the integration of workplace and off-the-job training (SSAB, 1992, pp.8-9). The curriculum language of the corporate era is concerned with competencies, learning outcomes, assessment criteria and conditions, the needs of industry, credentialism, and a standardised national framework of industrial awards. Nowhere in the new directives is any mention made of curriculum dissemination, diffusion or implementation, or of a concern that lecturers need to *understand* and *accept* curriculum change. The

perspective of the curriculum process put forward by the new national corporatism, in fact, is not much different from the perspective of the 1960s, following the early post-Tylerian paradigm, when it was assumed that, if curriculum materials were well designed, teachers would use them and use them correctly and students would learn from them. All that is deemed necessary is that the curriculum outcome statements are correctly set out according to the guidelines, and that lecturers are told to use them. A black box is assumed by the reformers to exist in TAFE colleges, whereby students will be exposed in some way to the competencies decreed by industry, and will pass out the other end as 'trained' tradespeople, technicians or para-professionals (G. Peate, Assistant Director (Academic) North Metropolitan College of TAFE, personal communication, 6 May, 1994).

A significant reform introduced to TAFE in Western Australia in the early 1990s, in line with the new corporate management approach, was the clustering of individual colleges into groups of larger colleges. Thus 11 metropolitan TAFE colleges became four, each with several campuses. Clustering included a provision for 'designated colleges' with responsibility for different curriculum areas. For example, Business, Child Care, Surveying, Foundry and Art related courses, to name a few, were designated the responsibility of the Central Metropolitan College; Fashion, Horticulture and Veterinary related courses went to South East Metropolitan College; Hairdressing to North Metropolitan College; Maritime and Mariculture to South Metropolitan College, and so on. Clustering was introduced to make management and administration more streamlined but, in the area of curriculum development and implementation, it created new divisions. There were also three rural TAFE colleges in Western Australia at that time, which were given minimal designated college responsibility for one study area each. Only one still retains a designated area. TAFE Regional Centres and TAFE Centres, scattered throughout the State, had no place in the designation of study areas. Formal attention to the dissemination process had been considered rarely enough in the management of curriculum change under the old structure but, with the organisational changes, informal diffusion of ideas across clusters became more difficult, and in some

study areas slowed drastically. As a consequence of the Vickery Report (1993), the Department of Training is now establishing a system of autonomous colleges, based on the original clusters. Two new rural colleges, and two metropolitan campuses have been added to the network and the three large rural community colleges are being brought under Department of Training management. The new system can be expected to pose additional challenges for curriculum dissemination. Certainly any informal curriculum diffusion which might still have been taking place in study areas across college clusters will become extremely difficult.

The formal curriculum development functions within TAFE and the Department of Training likewise have changed.

Officially, the Assistant Director (Academic) is responsible for the development and delivery of curricula in those study areas designated to his or her college. The Assistant Director (Academic) is a negotiator and a decision maker, a manager rather than a leader in the curriculum change process (Louis and Miles' (1990) distinction is discussed in Chapter 2). Leadership might be expected to come from the Study Area Leaders, who are responsible for courses, standards, staffing and resource issues in their specified study areas in all colleges throughout the State. However, as mentioned above, the role of the Study Area Leaders is becoming increasingly unclear.

The Western Australian Department of Training may apply, through SSAB, to the appropriate Industry Employment and Training Council (IETC) to have a new course accredited. The Council may recommend accreditation of existing courses proposed by the Department of Training or by a private provider (Accreditation path B), or may set up a Skills Formation Advisory Panel to oversee the writing and development of a new course (Accreditation path A). A Skills Formation Advisory Panel will include employer and employee organisation nominees, educational and training specialists external to the providing institution, and representatives of the client group (SSAB, 1992). For TAFE courses, these panels normally include a curriculum officer from the Department of Training, and sometimes a Study Area Leader. A designated college

will usually nominate one or more teachers to write a new course. Expertise on curriculum development and format according to SSAB guidelines is provided by a curriculum officer, and normally the Study Area Leader will check the new documents for content and teaching standards. The IETC Advisory Panel is responsible, through its employer and employee nominees, to the appropriate industry, and to SSAB, for meeting the prescribed criteria.

When the course is accredited, Curriculum Services takes responsibility for preparing the final documentation and making it available to all TAFE colleges via the College Management Information System network. The Assistant Director (Academic) at the appropriate designated college is officially informed that the course is available. The Assistant Director (Academic) is responsible for letting the Study Area Leader and all Coordinators in the State know about the new course, and negotiating with them on resources, staffing arrangements, and staff development required if and when they decide to run the course.

Subsequent communication and interaction with lecturing staff then becomes the responsibility of the Study Area Leader, although few would see it in terms of curriculum dissemination. The Coordinator in a college then puts in a tender for funding and staffing to run the new course, and presumably will inform the Study Area Leader and the Assistant Director (Academic). When funds are granted, staff are timetabled and the course is implemented as soon as classes can be organised.

However, there is still a large and important gap between the accredited curriculum document and the teaching materials which the lecturers need in the classroom. In the same way as the National Training Board has not appreciated that a list of competencies does not indicate how to train recruits for industry (Wilson, 1993), neither have the IETCs nor SSAB understood that the curriculum documents given to teachers need an enormous amount of development to turn them into useable subject notes, let alone exciting, high quality and well resourced teaching materials. Fullan

(1991) noted similar misunderstanding in North America when he warned that "curriculum guidelines are not meant to be the actual material to be used" (p.274).

It is proposed in this research that dissemination in the TAFE context needs to fill the gap between management and teaching staff so that good teaching materials can be planned and developed before implementation begins. Lecturers need information, time and support to do this. They need opportunities to understand the new documents and to be involved in developing high quality teaching materials based on them. This cannot be done on-the-run as they deliver the course for the first time, or in isolation as each lecturer uses what can be found easily in individual colleges. Lecturers need interaction with their peers and time for reflection, and a network of communication for sharing and improving on each other's ideas and, most importantly, the opportunity to find ownership and individual meaning in the new ideas.

It was interesting to do this research at a time of change and transition. Structural change inevitably emphasises the problems of communication, which is itself at the heart of the dissemination process. The curriculum change process had become absorbed in the restructuring process and to a certain extent could not be separated from it. This research highlights the difficulties typically associated with curriculum change, but they were magnified enormously by the added effects of political restructuring and cultural change.

TAFE, thus, can be seen as a unique system with its own politics, culture and social meaning. The next section examines some of the factors which make TAFE recognisably different from the schools sector, where much of the curriculum dissemination research published to date has been done.

Difference between the change environments of schools and TAFE

MacDonald (1991) defined three sequential stages of curriculum change in schools over the last 25 years: from package development, to teacher development and to school development (p.4). These stages have not been mirrored in the TAFE system. Curriculum development always has been a top-down decision making process in TAFE. While there have been occasional attempts to involve groups of lecturers formally in developing their own teaching materials (eg, Kennedy, 1985; Kennedy *et al.*, 1986; Sharp, 1988), and an attempt has been made over the last three years to set up a system of designated colleges to take responsibility for different curriculum areas, the experiment has not reached the lecturers in the way in which the schools based curriculum development movement did in the 1980s. There has never been, to use MacDonald's words, a "relationship between participants in the curriculum development enterprise [derived] from the notion of a professional, diversely accountable community" or "lateral rather than vertical lines of communication" in relation to TAFE curriculum change (p.4). There has been no interest in teachers as researchers or reflective practitioners, as has occurred in some schools.

Lecturer professionalism in the TAFE sector traditionally has been rooted in subject expertise, rather than in educational theory or reflective practice.

Rudduck (1991) wrote of "teachers' commitment to enquiry and innovation" which flourished in the wake of the curriculum reform movement of the 1970s as "a movement that was supported and inspired neither by government nor by schools but by teams of curriculum developers of uncertain status" (p.121). This has not been a part of professionalism amongst the majority of TAFE lecturers, although there is professionalism of a different kind and they would agree with Rudduck's emphasis on professionalism in the sense of their content expertise, or industry perspective, when she wrote that:

> ... change involves the adaptation or abandonment of practices that are familiar and therefore comfortable. If change is seen as a denial of a person's professional past, then his or her investment in a change programme will at most be slender. ... [T]eachers must come to feel that they recognize as significant the problem or situation that is defining the agenda for change (Rudduck, 1991, pp.30-31).

It is easier to talk about the *management* of change in TAFE than about transfer of meaning, or changing the culture of the institution, and part of this present project reflects this perspective. However, Rudduck (1991, p.32) stressed the importance of seeing change as a *cultural* not a *technical* problem. If this is difficult to achieve in the school environment, as Rudduck stated (p.31), it is even harder in institutions involved in training recruits for the harsh world of commerce, industry and the trades, and where the lecturers themselves frequently have come from middle management occupations.

Rudduck (1991) wrote in relation to school change that "theorizing is not easily accepted in institutions where common values have not been explored at any depth and where the predominant climate is by and large hostile to theory" (p.127). This is even more the case in the TAFE sector, where less than 75% hold formal teacher qualifications, and where the remnant power of the old trade based 'cardigan set' is still actively opposed to the development of a strong educational theory base.

There is a strong industry influence in the philosophy of TAFE colleges. Fullan's 1972 paper drew a distinction between educational and industrial goals. Industrial objectives have a strong bearing in TAFE thinking in the 1990s and demarcates the schools-TAFE divide more sharply. "Achievement of industrial goals ... often involves innovations that once implemented are standardized or 'built into' the manufacturing process, thereby reducing the need for a great many judgements on the part of the user" (Fullan, 1972, p.2). There is not a large place for "self-direction, critical thinking, capacity to gather, organize, and analyze new materials, ability to recognize and choose among alternatives, self-confidence, moral reasoning" (Fullan, 1972, p.2) for lecturers in TAFE colleges, although these characteristics are emphasised in TAFE

lecturer training courses (Killen, 1990). Fullan also refers to an industry preoccupation with being “among the first to innovate”, “innovating for financial rewards” and the significance of “ following authority decisions” in innovation, all of which colour the thinking of senior staff in the TAFE system.

The close relationship of TAFE with industry also helps to explain the almost obsessive rush to push changes through the system and into the classroom with insufficient attention given to the difficulties inherent in the process. Dunning’s (1993) change study of an innovation with the Technical and Vocational Education Initiative (TVEI) in the UK pointed to a similar situation, in which the heads of post compulsory education colleges were “particularly anxious to be seen by the business community to be proactive in meeting the future needs of industry” (p.43).

TAFE’s eagerness to respond to industry demands has been bolstered by State and federal governments, which have injected funds into its endeavours and encouraged its responsiveness (Stevenson, 1994). Responsiveness, however, also has had adverse effects. “It has created frequent, abrupt, incoherent and unsustainable changes in the shape and direction of the sector. It has also damaged TAFE’s reputation through the sector’s understandable inability to alleviate, immediately, all social and industrial problems” (Stevenson, 1994, p.15).

The fact that curriculum change has remained largely centralist, linear and hierarchical in the TAFE sector is the strongest justification for studying the phenomenon of dissemination partly from a management or leadership perspective. The ability to generate change based on reflection and action research has never been a strength amongst TAFE lecturers, and nowadays with the new emphasis of national curricular reform, based on competencies defined by the National Training Board and guidelines imposed by the Australian National Training Authority (both housed in cities thousands of kilometres from Western Australia), has reinforced the old hierarchical ‘centre-periphery’ model popular in the 1960s and early 1970s.

TAFE professionalism, rooted in subject or content expertise as it is, gives rise to a much wider philosophical diversity than is found in schools. Approximately 55% of TAFE lecturers have tertiary qualifications (Diploma and above) in areas as diverse as agriculture, art, accounting, computing, electronics, engineering, marketing, nursing, medical technology and the sciences. Others come from industries such as automotive, building, child care, electrical, fashion, horticulture, metal fabrication, plastics, real estate, secretarial and social welfare. If, as Billig claimed in 1976, "professionalism contains its own ideology" and, like other ideologies, embodies elements of "falsity" and "obscurity" which are beyond personal choice, it is easy to understand the vast range of belief systems present at any one time in any TAFE college. Decker Walker (1971) might have despaired of such groups ever finding a common 'platform' on which to build change decisions. Once this is grasped, it enables us to understand better some of the conflicts in TAFE curriculum change, and why lecturers feel that they are always making compromises rather than finding long lasting solutions to educational problems.

Not only does the TAFE environment spawn diversity of professional beliefs amongst staff members, but the ideology of curriculum professionals themselves continuously comes into conflict with that of lecturers, industry, administration and professional associations, each with its own professional ideology and each restricted by its own elements of falsity and obscurity. Curriculum language is not the same as the language of business and industry.

TAFE lacks the cohesion of schools. There is very little intercourse between different study areas and few easily recognised common directions. There exists an intense possessiveness about each study area's own industry, and lecturers' perceptions of what it wants and how best to serve its needs. The move to college autonomy is likely to increase and disperse further the different centres of power and belief systems.

Another consequence of this internal diversity is that it is a difficult environment for research. TAFE lecturers can be suspicious of and impatient with university research,

which must consider a diversity of perspectives from a range of individuals involved in a project. There is an isolationist mentality evident at times, as well as a diversity of centres of power, both of which make it difficult to obtain clear and full information. Some of the information given to the researcher in this study was at times erroneous or misleading and required further enquiry and verification. This is less likely to occur in the schools, where there is less diversity and more clearly defined lines of responsibility.

Research questions

Curriculum literature suggests that good dissemination strategies, as a part of the initiation, adoption and implementation phases of educational change, hold a central role in the change process. In this research, the issues pertaining to curriculum dissemination in TAFE were explored. The research aimed specifically to identify the dissemination factors which influence the process of curriculum change negatively and positively and to focus on those factors which are necessary for improved practice in future curriculum innovations.

The hypothesis for research reported in this thesis is that there are serious deficiencies in the curriculum dissemination process which need to be identified. A strategy, or series of tactics, for improved success in the TAFE curriculum change process needs to be developed to overcome the deficiencies. Three questions were delineated to test this hypothesis:

1. What are the issues which concern users and disseminators in regard to curriculum dissemination in TAFE?

2. Which factors are important in ensuring effective curriculum dissemination in TAFE?

3. Based on the factors identified, can an effective strategy be devised for curriculum dissemination in the TAFE context?

The research explores these three questions in the TAFE context in three phases:

1. A pilot study, involving interviews about the dissemination concerns of lecturers and administrators. This aspect and its findings are presented in Chapter 4.

2. A questionnaire survey of TAFE lecturers on the relative importance of dissemination strategies used in current innovations. This is described in Chapter 5.

3. Testing a new dissemination strategy, using a case study of a selected curriculum project. A description and analysis of the tactics used in the test is given in Chapter 6.

It was hoped that the research would lead not only to an increase in knowledge in the area of curriculum dissemination, but also to the improvement of efficiency in the process of educational change in the TAFE sector in Western Australia and nationally.

Conclusion and overview of thesis structure

This chapter delineates the scope of this enquiry and describes and analyses the historical, political and cultural environment in which the research was conducted. It contends that there is an important but untapped area for research into curriculum dissemination within the context of this environment and anticipates some of the factors which make the problem of curriculum dissemination unique in this environment. It hypothesises that there are serious problems which need to be identified and solved.

Chapter 2 examines the literature on educational change and the curriculum dissemination process in particular, where possible, focusing on existing research pertinent to the TAFE sector.

Chapter 3 describes the research methods used and provides evidence for their validity.

The next three chapters describe the application of the research methods and the findings for the three stages of the research, namely, the pilot study involving semi-structured interviews about the dissemination concerns of TAFE lecturers (Chapter 4), a questionnaire survey about the importance of a number of dissemination strategies used in TAFE (Chapter 5) and testing the viability of a new dissemination strategy using a case study of a curriculum project (Chapter 6).

Finally, Chapter 7 presents an overview of the findings, suggestions for future directions and conclusions.

Chapter 2

The literature

It is easier to get a man on the moon than to reform schools (Cuban, 1992, p.216)

There has been little research done in Australia in the area of curriculum change in the Technical and Further Education (TAFE) sector. Much of the relevant research comes from the USA and the United Kingdom, and concerns the primary and secondary schools sectors. However, there is a growing body of writing and research on TAFE, much of it published in the *Australian Journal of TAFE Research and Development* between 1985 and 1992, and the *Australian and New Zealand Journal of Vocational Education Research*, which replaced it in 1993. The National Centre for Vocational Education Research (previously the TAFE National Centre for Research and Development) has produced a steady stream of research and policy reports since its inception in 1982 and, in that time, has set up the TAFE National Clearing House and VocEd database. During the past decade, TAFE-related papers also have been presented at national conferences in ever increasing numbers, and conferences on TAFE themes have been held regularly for the last few years. From these conferences, collections of edited proceedings have been published (Centre for Skill Formation Research and Development, 1993; National Centre for Vocational Education Research, 1992; Atkinson & McBeath, 1990).

The study of curriculum change in the TAFE sector is an infant field and reports are sparse and scattered. The VocEd database is only now beginning to feature significant research names and titles. However, it is possible to find published comment on a number of the issues relevant to this present research, although not necessarily related in its focus or content, nor specifically applicable to curriculum dissemination.

In this chapter, an examination is made of mainstream literature on educational change and the significance of dissemination as a part of the change process. Wherever

possible, relevant, if scattered, references to Australian literature on TAFE have been included to develop and support the context of the research.

This review looks first at the history of the development of educational change theory since 1970 and, second, defines the meaning and role of dissemination within the change process. Third, the main issues and problems found in the literature are discussed in relation to TAFE and to the present study. Fourth, the concepts of educational management (top-down) and teacher collaboration (bottom-up) curriculum development are examined critically in relation to dissemination and diffusion and the place of teacher meaning in the change process. This section sets the scene for the direction of the present research and its conclusions. Finally, the review looks briefly at the theoretical perspectives which influence and shape both the philosophy of TAFE in Australia and the directions of this research.

Brief history of research on educational change theory

Fullan (1991) wrote of four distinct phases in the evolution of the study and practice of planned educational change in schools in North America. He labelled them *adoption* (1960s), *implementation failure* (1970-1977), *implementation success* (1978-1982) and *intensification versus restructuring* (1983-1990) (p.5). These stages are recognisable in the curriculum literature from the United Kingdom and Australia, perhaps with local variations and with the edges between the phases less distinct than they were in the United States.

The *adoption* phase of the 1960s referred to the period of new math, new approaches to physics and chemistry, open classrooms, student centred and deductive learning, individualised instruction, etc, and included the development of large scale innovations such as *Nuffield Science* in the UK (1969) and, in the USA, *Man: A Course of Study* (1970) for primary school social studies. Innovation was seen as a ‘technological’ and ‘top-down’ process, whereby new knowledge was developed into teaching materials

and delivered to potential users to put into practice. ‘Change’ was seen as occurring when the innovation was adopted.

It was in this phase that Miles (1964) suggested that it could take 50 years for a new practice to become widely established in education, and that little was known about the process of change, or how to accelerate it. As a result of comments like this, the 1960s spawned a period of interest in dissemination models. Clark and Guba developed the Research, Development and Diffusion (RD&D) model in 1965. Havelock, writing in 1969, was interested more in the dissemination of knowledge than of educational change. He wrote about building a “science of knowledge utilization”, requiring a series of coherent and systematic research programs built around evolving, theoretical models. He described three models, the Research, Development and Diffusion model (RD & D), the Social Interaction model (SI) and the Problem Solving model (PS), in an attempt to explain the different ways in which new knowledge is spread to those who need it (Havelock, 1969). He synthesised the concept of ‘linkage’ based on the Problem Solver model, focusing on the user as problem solver, thus building a bridge into Fullan’s second phase, when the consumer, or user of innovation, moved to the forefront of research interest.

Although these models were based on evidence from outside the field of educational change, they aroused considerable interest in the educational community. The search for models continued early into the next decade, with Schön (1971), for instance, developing the Centre-Periphery, the Proliferation of Centres and the Shifting Centres models. In the same year, Rogers and Shoemaker (1971) attempted to explain the working of superordinate and subordinate groups within the dissemination process and devised an authority-innovation-decision-making system, based on the five functions of knowledge, persuasion, decision, communication and action.

Fullan’s second phase, *implementation failure* (1970-1977), was defined from the point where researchers began looking at the problems of educational change. This was the period, Fullan wrote, when many of the innovations developed in the 1960s

were observed to be failing in the schools (Bredo & Bredo, 1975; Fullan, 1972; Goodlad & Klein, 1970; Gross, Giacquinta & Bernstein, 1971; Smith & Keith, 1971). The RD&D model had failed to bring about sustained change and the promotion of change was proving to be more complicated than first thought. Research became focused on the post-adoption or implementation stage, or what happened to an innovation after its adoption. Research in this phase attempted to explain the dynamics of the implementation process (Berman & McLaughlin, 1976, 1978; Fullan & Pomfret, 1977; Kritek, 1976; Zaltman & Duncan, 1977).

Outside the USA, similar studies were being made of projects like Australia's *Social Education Materials Project* and *Senior School Geography*, and the United Kingdom's *Schools Council Humanities Project*. The 1970s was a period of intense interest in discussing and researching curriculum change, when many universities in the English speaking world set up post-graduate courses in Curriculum Studies and the subject came into its own as a valid study stream in Education. Theoretical perspectives at the time were built around the concepts of fidelity of use and mutual adaptation, adoption, adaptation and rejection, dissemination, diffusion and implementation. Researchers' perspectives tended more towards teachers as users, although the processes in use were still largely 'top-down'.

In 1971, Becher re-examined Havelock's three models to define for the 'external change agent' a role believed to be a key to the degree of variance between the controller and the receiver of change. Havelock adopted and developed the term 'change agent' in his 1973 book, *The change agent's guide to innovation in education,* referring to the need for someone in the change process to promote, inform, demonstrate, train, help and nurture the 'clients' involved in change (p.115). The concept of the 'change agent' became popular, and has been used frequently by writers on educational change since that time (Berman & McLaughlin, 1978; MacDonald & Walker, 1976; Marsh, 1986a; Miles, 1987; Miles, Saxl & Lieberman, 1988; Olson, 1980). It is a term used in this present research to describe the role of the researcher in the dissemination strategy described in Chapter 6.

The third phase, *implementation success* (1978-1982), represented the period which Fullan saw as producing "pockets of implementation success" (p.6). Many of the projects developed with such soul-searching agony in the 1970s were now in place, although teachers were found to be interpreting new materials to fit their own constructs of classroom reality. Examples in Australia include the *Multi-Cultural Education Materials* project, developed over four years and launched in South Australia in 1981 (Donohoue-Clyne, 1986). In Britain, the Schools Council curriculum materials had been adopted and adapted into a wide range of unexpected educational settings (Humble & Simons, 1978; Whitehead, 1980).

This was not so much a phase as perhaps a recovery from the previous phase. In 1982, Fullan's major work on the meaning of educational change was published and, as he pointed out, a lot more was known about the change process, and what was going on in schools, than had been conceived 20 years earlier. This didn't mean that the problems had gone away. The 1980s was a lively period of curriculum development in Australia (Fraser, 1985; Kennedy, 1986; Marsh, 1986b; Marsh & Carter, 1980; McBeath, 1988; Mitchell & Traill, 1986, etc.) and much of this literature confirms that many of the earlier problems were still there.

Fullan's third phase gave rise to yet another direction in curriculum change theory. By the late 1970s, the literature suggested that planned educational changes, when successful, pass through a number of recognisable stages, namely, adoption, implementation and institutionalisation (Berman, 1981; Fullan, 1982; Miles, 1978).

The fourth stage, which Fullan (1991) called the *intensification versus restructuring* phase, was upon us before we had had a chance to master the previous phase. What in the TAFE context can be called 'new corporatism', and which is more a feature in Australia of the 1990s than of the 1980s, was seen by Fullan in the United States as a double edged but conflicting, legislated mandate to reform. He described it as two concurrent 'waves' of reform:

> One wave of reform ... I have called ‘intensification’. Increased definition of curriculum, mandated textbooks, standardized tests tightly aligned with curriculum, specification of teaching and administrative method backed up by evaluation and monitoring all serve to intensify as exactly as possible the what and how of teaching. The other wave ... goes by the label of ‘restructuring’. It ... usually involves school based management; enhanced roles for teachers in instruction and decision making; integration of multiple innovations; restructured timetables supporting collaborative work cultures; radical reorganization of teacher education; new roles such as mentors, coaches , and other teacher leadership arrangements; and revamping and developing the shared mission and goals of the school ... (p.7).

MacDonald (1991) referred to this phase in the United Kingdom with a touch of cynicism:

> Reform is now the banner headline of the politicians who have seized upon the alleged failure of the innovators so as to take control of the process of change ... There is an ambiguity in the rhetoric of the reformers that should not escape our notice, and that helps to explain why the most unlikely of bedfellows, elitists and egalitarians, can be found among their ranks. It is not always clear whether they are claiming to be able to achieve the same objectives as the innovators by more effective means ... or whether the allegation is that innovation has been successful but regressive, so that what is required is a restoration of former virtues that are threatened by abuses introduced and fostered by meddling and muddle-headed professionals (p.1).

Theories related to this stage are still being developed, but many of the earlier issues are still relevant. Recent research studies (eg, Dunning, 1993; Elliott, 1994; Giddings & Fraser, 1992; Godlin Roemer, 1991; Maloney, 1993; Mills, 1992) indicated that many of the educational change problems identified in the 1970s, two phases ago, are still with us and that we have progressed little past the “pockets of implementation success” described by Fullan.

It is appropriate then to examine the literature on the change process and focus on the problems and difficulties discovered in 25 years of research as they pertain to dissemination and the current project.

The educational change process and the place of dissemination

Throughout the literature on educational change runs a common theme of despondency about how difficult the process is. “Changing schools is like moving a graveyard”, wrote Rickover (1983). Kelly (1982) wrote of “traditional, technological, administrative, economic, ideological and social pressures”, which complicate and confuse planning for curriculum development in schools. “Findings from research in implementation are inconclusive and contradictory”, wrote Loucks and Lieberman (1983). “It is not yet known what should be done to successfully implement new curricula in different settings, under different conditions” (p.126). Curriculum change, wrote Paris (1989), “occurs in situations in which a certain amount of consonance and conflict will inevitably occur”. Fullan (1991) described the process as “complex and dilemma ridden” (p.90). Snyder *et al.* (1992) drew on the previous 20 years of research to refute any assumption that “the move from the drawing board to the school or classroom was unproblematic, that the innovation would be implemented or used more or less as planned, and that the actual use would eventually correspond to planned or intended use” (p.403). Few of the writers on curriculum change were totally pessimistic, however, and they variously urged planners and reformers to study the experiences of the past as a way to achieve improvement in the future.

The change process often is seen in three broad stages. The first, variously labelled *initiation, mobilisation* or *adoption*, consists of all the decisions and activities which occur before the change is put into place in the classroom. *Implementation* or *initial use*, the second stage, involves putting the curriculum idea or change into actual use in the school or classroom. The third stage, which different writers call *continuation, incorporation, routinisation,* or *institutionalisation*, refers to those processes and decisions which lead to the change either being ‘built in’ as an ongoing part of the learning environment, or rejected (Berman & McLaughlin, 1978; Fullan, 1991; Huberman & Miles, 1984).

However, Marsh (1992) contended that recognition should be given to a distinct first stage, which he called the *orientation and needs* phase, and Fullan (1991) stressed that change should include a later stage, which he called the *outcomes* stage, to cover a longer term extension of continuation, including improved student learning and attitudes, new skills, attitudes or satisfaction on the part of teachers or school (p.48). □ With the addition of these extra two stages, the change process can be defined more clearly as consisting of five distinct stages. The importance of dissemination within these five defined stages is depicted graphically in Figure 2.1.

Figure 2.1 Stages of curriculum change and the importance of dissemination

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Orientation **Needs**	**Initiation** **Mobilisation** **Adoption**	**Implementation** **Initial use**	**Continuation** **Incorporation** **Routinisation** **Institutionalisation**	**Outcomes**

Dissemination important
Dissemination essential
Dissemnination as monitoring and collecting feedback

Fullan (1991) stressed the broadness and inter-connectivity of any nominated stages in the change process:

> First, there are numerous factors operating at each phase. Second, ... it is not a linear process but rather one in which events at one phase can feed back to alter decisions made at previous stages, which then proceed to work their way through in a continuous interactive way. The third set of variables ... concerns the scope of change and the question of who develops and initiates the change. ... the concept of 'initiation' leaves open the question of who develops or initiates the change. ... The fourth complication ... is that the total time perspective as well as sub-phases cannot be precisely demarcated. The initiation phase may be in the works for years, but even later specific decision making and pre-implementation planning activities can be lengthy (pp.48-49).

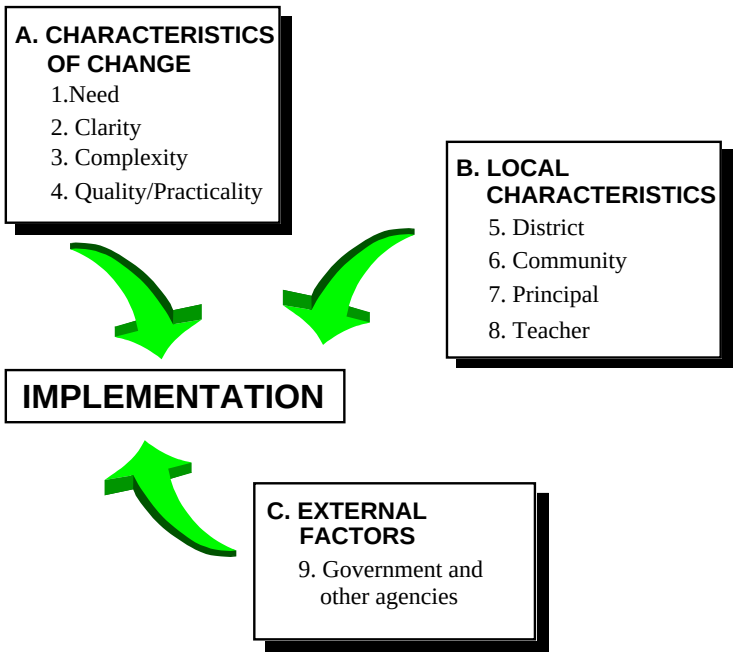
This study is based on the assumption that dissemination should span several of these stages. Dissemination, defined in this study as the process of *informing* teachers about new or revised curriculum ideas, documents or materials, so that they *understand* and *accept* the innovation, is seen as important in the needs or orientation stage, essential during initiation and implementation, and continuing as course monitoring and utilisation of feedback as the innovation becomes part of routine practice (Figure 2.1).

Marsh (1992) called on the work done at the University of Texas, Austin, on a taxonomy of interventions (Hall, Zigarmi & Hord, 1979) to explain the workings of the change process within phases in terms of strategies and tactics. A strategy in curriculum development is a plan for innovation, while a tactic is a specific action taken to reinforce the impact of a strategy (Marsh, 1992, p.143). Dissemination can be seen as a strategy, consisting of a series of tactics. Bennis, Benne, Chin and Corey (1976) defined three types of strategies, *power-coercive*, *normative / re-educative* and *empirical-rational.* Curriculum change in TAFE tends to the first of these, but has elements of the empirical-rational, especially when lecturers can see obvious need for change because of rapid changes in industry. The terms ‘strategy’ and ‘tactics’ are used in the final part of this research to describe the model and techniques used in the field test. The tactics used were mainly *normative / re-educative,* according to Bennis, Benne, Chin and Corey’s (1976) definition.

Strategies are comprised of tactics or specific actions, or techniques, devised to make the strategy work or, in this case, to facilitate change. Marsh (1992) divided tactics into impersonal information (direct mail, mass media, printed matter, professional associations), personal demonstration (on-site, visitation, workshop) and interpersonal field agents (non-commercial and commercial). He rated each of these according to their cost, coverage, impact, convenience and rate of feedback, and delineated them into categories of ideal and unsuitable situations (pp.144-145). The suitability of tactics needs to be considered carefully in the planning of dissemination.

In 1977, Fullan and Pomfret devised a list of determinants affecting the level of success of implementation, which they had extracted from their analysis of 16 case studies in the USA. Although they did not discuss these in terms of initiation or dissemination, the word 'determinant' implies a causal relationship between planned strategies and subsequent successful change. As discussed in Chapter 1, it is possible only to analyse dissemination in light of what happens, or doesn't happen, during implementation. In this sense, Fullan and Pomfret's 'determinants of implementation' can be interpreted as characteristics to be considered in the dissemination process. They organised the factors into four broad categories. Fullan continued to fine-tune these factors as further data were collected over the ensuing years, expanding and developing them in 1982, and simplifying and generalising them again in 1991 (see Figure 2.2).

Figure 2.2 Interactive factors affecting implementation



(Fullan, 1991, p.68)

Some aspects of the 1991 version coincide with the factors currently affecting the curriculum change process in TAFE. The most relevant of these factors to this study

are advocacy from central administrators, external change agents and, to a lesser extent, new policy and funds. These are all external factors, from government and other agencies, according to Fullan's categorisation. TAFE curriculum innovations in Western Australia might have been initiated by lecturers, Study Area Leaders or local industry in the past, but now the push invariably comes from formal avenues of industry advice, both local and national. Behind these is the National Training Board, the Australian National Training Authority and the Federal Government. Recurrent funding for mainstream TAFE training courses comes through the State Government to TAFE, while the Department of Employment, Education and Training offers special funding for labour market and job creation programs. These are the power groups which can be considered the chief source of pressure for and initiation of new programs the TAFE system.

Fullan's work has influenced other researchers looking for lists of important factors in the change process, as the search for a successful formula continued. The Crandall *et al.* (1982) study identified the factors which affected dissemination and implementation from a national study of 60 innovations in 165 schools in the USA:

> We found that with clear, direct leadership from building and central office administrators, training by a credible person in the use of practice that was known to be effective, and continued support and assistance, teachers tried the new practice, mastered it, saw results with their students and developed a strong sense of ownership. And with little or no early involvement in problem solving, selection or decision making (Crandall *et al.*, 1982, p.7).

Snyder *et al.* (1992) claimed that in the 1980s many of the prescriptions for curriculum change were based on the data generated from the DESSI (Dissemination Efforts Supporting School Improvement) study (p.210). They described the factors of the modified RD&D (Research, Development and Diffusion) model of the National Diffusion Network which were used to bring about change following adoption. It can be seen that planning for successful innovation had to be in place as part of a well designed dissemination strategy before implementation began, including the mechanism for monitoring the program. Snyder *et al.* cite Parish and Aguila (1983) to

report that the methods used by the National Diffusion Network to bring about change after adoption included four steps:

> (1) the teacher learned the technology of the new program in a short workshop;
> (2) teaching materials and other needed products for the program were provided;
> (3) help was offered by the principal or external change agents when needed; and
> (4) administrative personnel or external change agents continually monitored the fidelity with which the program was being implemented (Snyder *et al.*, 1992, p.409).

Snyder *et al.*, referring to a report by Loucks (1983), stated that the characteristics of successful dissemination and implementation strategies included:

- Curricular or instructional practices that were carefully developed, well defined and determined to be effective;
- Training by credible people, often former teachers, and follow up support activities through the first three years;
- Assistance and support by an array of players, including other teachers, principals, district staff, external trainers, and linkers;
- Attention to factors contributing to institutionalization, including line items on budgets, orienting or reassigned staff, and writing the changes into curriculum guidelines (Snyder *et al.*, 1992, p.409).

Huberman and Miles (1984) undertook a detailed study in the USA, in an attempt to match four types of innovative change scenarios (salvaging, enforcing, overreaching, refitting) with four outcomes — high outcomes from enforced, stabilised use; moderate-high outcomes from high mastery and low settledness; moderate-low outcomes from program blunting and downsizing; and failing or low outcomes from indifference and discouragement (pp.255-270). They used six ultimate outcome variables (p.189), consisting of stabilisation of use, percentage of use, institutionalisation, student impact, user capacity change, and job mobility (pp.191-251). They found several paths to high outcomes, although they were able to isolate some important factors present in all high outcome innovations. They concluded that attention needs to be given in curriculum innovation to the quality of the setting and actors involved in the project.

Miles, Saxl and Lieberman, in an article published in l988, looked at the skills which a change agent needs. A synthesis of their findings resulted in a list of 18 key skills for educational change agents, including general, personal, socio-emotional, task and educational content skills.

Kennedy (1985) and Kennedy, Williamson and Patterson (1986), in their study of two TAFE curriculum projects in Western Australia, reiterated Fullan's determinants, but particularly stressed the importance of the following three factors:

- the explicitness of each innovation
- feedback mechanisms used prior to and during implementation
- level of participation by users (Kennedy, 1985, 70-71).

This approach to making lists or models could be a useful guide to administrators and disseminators, but it assumes a rational sequence of events which possibly never occurs in real life. As an exercise in defining factors, it is representative of the technological perspective, and is reminiscent of the period of model building in the late 1960s. House (1979, p.3) criticised the RD&D (Research, Development and Diffusion) model, as an example of this perspective, as one requiring "massive planning, a division of labor, high development costs, and a passive consumer". He believed that these characteristics would rarely be present in most educational innovation. Fullan (1991) wrote that "no technical checklist ... can come close to matching the power of knowing the dynamics of social change. Dealing effectively with the implementation of educational change involved more than anything else a way of thinking — a feel for the change process" (p.198). The exploratory questions used in the pilot study (see Appendix A1 and Chapter 4) were based at this level, using factors such as those mentioned above as prompts for open ended responses.

More convincing, perhaps, is an approach to the change process involving the examination of the issues and problems found in dynamic, interactive situations. This approach gives a better sense of the reality of the culture and the meaning of change to those involved in it. It more clearly reflects the human face of coping with change

which became so important in applying the dissemination model used in this research. The next section explores the literature related to these issues.

Issues and problems of educational dissemination

The concept of bringing about successful change has been exceedingly elusive (Fullan, 1991, p.66). Much of the literature recognises the variability and liquidity of individual situations, and the difficulty of determining a single model to suit all. The sheer complexity of the change process means that, as research seeks key concepts, it must also recognise the dynamics of each innovation as being uniquely different. Fullan (1985) stated that the management of change calls for

> ... combining and balancing factors that do not apparently go together — simultaneous simplicity-complexity, looseness-tightness, strong leadership-participation (or simultaneous bottom up-top downness), fidelity-adaptivity, and evaluation-non-evaluation. More than anything else, effective strategies for improvement require an understanding of the process, a way of thinking that cannot be captured in any list of steps or phases to be followed (p.399).

While it is recognised that there is probably no such thing as a definitive set of issues involved in change, it is possible to examine a number of the problems which appear frequently in the literature, and relate them to identified uncertainties in the TAFE context. There are eight broad areas which are mentioned frequently in the research literature as problematic and which are examined in the following pages:

1) relevance of the innovation
2) participation and ownership
3) complexity of the innovation
4) personal support: staff development and skills training
5) material support: finance, time, equipment, resources
6) leadership and advocacy roles and functions
7) feedback during dissemination and early implementation
8) personal and cultural meaning.

Relevance of the innovation

"Is change necessarily positive?" and "Is it necessarily positive for all?", Cuban (1992) asked. As long ago as 1949, Tyler wrote that curriculum change needed to be built on one fundamental question, "What educational purposes should the school seek to attain?" Since then, students and practitioners of curriculum development have been looking idealistically at pupil and societal needs, seeking the cognitive, physical, emotional, psychological, spiritual and vocational needs of children, so that schools can develop better programs to prepare them for life. The reality is often cynically different:

> Curriculum policy is seldom rational or based on research. Decisions are not often based on careful analysis of content in the disciplines and on societal needs, or on studies of the learning process and concerns of learners. Curriculum decision making is a political process. Different pressure groups are proposing competing values about what to teach (McNeil, 1990, p.260).

Cuban (1992) wrote of the political complexities influencing the decision making process, and implied that what is appropriate for one power group might not be relevant for another group with a different set of objectives:

> New goals and functions are derived from political coalitions, bargaining between stakeholders, and social movements. Various government agencies and groups within the private sector interpret and enact the functions. Groups inside the school system also operate within a political arena. Tensions between students and adults in schools — between teachers and administrators, for example — are acted out and negotiated politically. The results of this political activity combine to maintain, rather than to alter in any fundamental way, what curriculum is intended or taught (p.238).

Fullan (1991) questioned the soundness or appropriateness of many innovations, stating that political or career motives are often the driving force for change. He referred to the Gross, Giacquinta and Bernstein (1971) and Smith and Keith (1971) case studies described in Fullan and Pomfret (1977), and suggested that these authors never questioned the 'goodness' or appropriateness of the changes which they described. The inappropriateness of those innovations in those settings could have been fundamental to

their lack of success (pp.19-20). He warned against attempting to 'legislate learning' (p.18), which in fact is occurring currently in the TAFE sector as part of its competency-based training thrust, and implied that we shouldn't be surprised if real change fails to occur. He distinguished between opportunism and problem solving as motives for change, and observed that the latter, based on locally identified needs, tends to be a more successful basis for change (p.21). He listed inappropriate practice in staff development, schools based development and the motives of the prime movers as factors in the failure of change (pp.22-23). He warned that reform is not about putting into place the latest policy or directive from the government (p.xii). He also suggested that resisting certain changes can be more progressive than adopting them (p.4).

Huberman and Miles (1984) stated that teachers must perceive that the 'needs' being addressed are significant. Needs, however, are diverse and, in the context of the variety of values and experiences in TAFE described in the Chapter 1, it is very difficult to convince lecturers that any set of proposed changes are the most needed or the most appropriate ones. Stevenson (1994) pointed to the unsolved tension created between two opposing views of relevance for TAFE teaching. He quoted successive commonwealth government reports calling for, on one hand, TAFE courses to meet the vocational needs of the community and industry, basing "training arrangements on the analysis of skills involved and the efficient ways of acquiring them" (Williams Report, 1979, p.337) and, on the other, a shift in its primary emphasis from anticipating and meeting the vocational needs of the community to meeting the needs of the "individual person" (Kangan Report, 1974, p.14).

> The Tertiary Education Commission (1981, p.99) argued for relevance to include 'broader value as well as ... specific vocational purpose'. In 1984, the Commonwealth Tertiary Education Commission sought educational participation and equity (p.94) while in 1987, it was promoting 'broad-based generic skills involving diagnostic skills, problem solving, interpersonal skills and information technology' (p.38). ... The Department of Employment, Education and Training in 1988, focused almost exclusively on a contemporary instrumental role for TAFE (DEET, 1988, p.1). ... In 1989, the Minister for Employment, Education and Training again urged 'improvements in relevance [Dawkins, 1989a, p.2] and

> prioritised the relevance to 'potential skill shortages, areas of significance to the economic development of the State, the pace of award restructuring, in particular industries and equity objectives' (p.6) (Stevenson, 1994, p.14).

McBeath (1991) wrote of the problem for curriculum developers in "serving two masters" when "the goals of industry and those of education and society are often in conflict" (p.15). Occupational analysis and needs assessment can produce two different sets of data, according to the philosophies and perspectives of those involved in the process of change.

The problems of relevance and appropriateness, and the conflicting demands of industry, society and the needs of students can create enormous difficulties for TAFE teachers and administrators in times of change. Stevenson and Laird (1993) advocated *appraisal of concerns, formulation of intent* and *deliberation about practice* as essential for determining what is relevant and of value for new TAFE courses. Very little consideration of such reflective practices, they claim, is found in TAFE.

Participation and ownership

Fullan (1991) recommended that participation should be something "that begins during initiation, and grows and grows through action" (p.63). In the context of TAFE curriculum change, teacher participation too often has consisted of teachers being given the new syllabus and told to develop their own teaching materials as they teach it, a somewhat different situation from what Fullan meant.

Many researchers emphasise the need for user participation in the development and trial stages of curriculum innovation (Fullan, 1991; Kelly, 1982; Kennedy, 1985; Loucks & Lieberman, 1983; Rudduck, 1991). Dawe (1989) described teacher collaboration in curriculum change as "a tool of teacher empowerment and professional enhancement, bringing colleagues and their expertise together to generate critical yet also practically-grounded reflection on what they do as a basis for wiser, more skilled action" (no reference, cited in Fullan, 1991, p.142).

Scholars from the United Kingdom long have stressed a strong teacher participation role for teachers in curriculum development and change (Kelly, 1982; MacDonald & Rudduck, 1971; MacDonald & Walker 1976; Rudduck, 1991; Stenhouse, 1975).

Kelly (1982) looked at the early work done by the UK Schools Council curriculum teams. There had been a tendency for teachers "to invest the development team with the kind of authority which can atrophy independence of judgement" (MacDonald & Rudduck, 1971, p.149) existing alongside anxiety on the part of some teachers that they might lose their own style by accepting the specifications of innovation. Both these factors, Kelly wrote, "seem to point to the need for a full and proper involvement of the teachers with the development of the project" (p.136).

Rudduck (1991) drew on research conducted into schools based curriculum development in 36 high schools in the Sheffield Local Education Authority, to add support to the importance of teacher ownership as a factor of school improvement (pp.123-125). She pointed out that, while the term *ownership* remains undefined and vague, it is a word that makes people feel that they are participating in worthwhile communal action. It inspires a "collective confidence" (p.123). More importantly for this present research, she supported Marsh and Huberman (1984) and Fullan (1985) in contending that teacher ownership can exist side by side with central initiative and direction, and that ownership can legitimately be claimed by both teachers and central administration (p.124).

Ownership is indeed a fragile and easily threatened thing. Rudduck's (1991) account described the rifts and resentments which arose between the development team of seconded teachers and their senior management and, more seriously, between the seconded teachers and their colleagues, who were not on release. In regard to the seconded teachers themselves, Rudduck wrote, "It took time to build a sense of real collaboration and trust and a readiness to look together at fundamental values and the hidden curriculum of secondary schooling" (p.125). Also important in the context of

this research is her account of the suspicion one school displayed towards one of the universities involved in the project.

Fullan (1991) also criticised the practice of selecting some teachers to work on curriculum committees or in program development, in the expectation that they will increase acceptance among other teachers. He pointed out that, as far as the other teachers are concerned, change that was produced by fellow teachers was just as much "externally experienced" as if it had come from the university or the government (p.127). He cited the production of provincial curriculum guidelines in Canada, involving selected teachers in work groups and committees. However, despite the fact that the new materials had been developed by teachers, they were still alien to the vast majority of teachers who were seeing them for the first time (p.63).

On the other hand, there is also some evidence that large scale participation at the initiation phase is also counterproductive (Fullan, 1991; Huberman & Miles, 1984).

> Elaborate needs assessments, endless committee and task force debates, and the like often consume large amounts of energy and time, and ironically can create confusion and alienation in the absence of any action. There is even the not unlikely situation where elaborate pre-action discussions exhaust the energy needed for implementation, so that by the time the innovation reaches the action stage, people are burnt out (Fullan, 1991, p.62).

Reference is made later to Rudduck's (1991) preferred methodology of "teacher research" as a means of achieving teacher ownership, collaboration and involvement in the change process. Her experience and research reiterate that any dissemination process which does not involve personal meaning for teachers and students cannot hope for success.

There have been very few studies pertaining to user involvement in TAFE curriculum development in Australia during the last decade. A comparative study of the implementation of a new modularised *Plumbing Pre-apprenticeship* course and a *Certificate Course for Electrical Trades* in TAFE in Western Australia reported that

the attitudes of lecturing staff involved in the development process proved significantly better than those of the others who had to cope without participation (Kennedy, 1985; Kennedy *et al.,* 1986). Another study examined specific management process guidelines and the views of TAFE participants involved in curriculum development of Industrial Simulation Instructional Packages (ISIPs) for fitting and machining. Although there were serious planning and management problems with the project, the user response findings were supportive of the importance of user participation (Sharp, 1988). Even though these projects identified some of the important issues in the implementation of curriculum change in TAFE, the findings coincided with the point in time when the Curriculum Branch ceased the centralised production of Teaching Notes, and lecturers were expected to develop their own materials, often in their own time, a consequence far from the intentions of both projects, and even further from the findings of Fullan, Kelly, Rudduck and Stenhouse described above.

Complexity of the innovation

Many writers have stressed the effects of complexity of planned educational change (Berman & McLaughlin, 1977; Crandall & Associates, 1983; Fullan 1991; Huberman & Miles, 1984; Rudduck, 1991).

There is conflicting evidence in the research literature regarding the desirability of large or complex change. Berman and McLaughlin (1977) found that “ambitious projects were less successful in absolute terms of the percent of the project goals achieved, but they typically stimulated more teacher change than projects attempting less” (p.88). The DESSI study (Crandall & Associates, 1983) supported this, suggesting that the “larger the scope and personal ‘demandingness’ of the change, the greater the chance for success” (p.25). On the other hand, Huberman and Miles (1984) found that schools often attempt to implement innovations that are beyond their ability to carry out. Fullan (1991) summarised this dilemma:

> Simple changes may be easier to carry out, but they may not make much of a difference. Complex changes promise to accomplish more ... but they also demand more effort, and failure takes a greater toll. The answer seems to be to break complex changes into components and implement them in a divisible and/or incremental manner (pp.71-72).

The concepts of developmentalism (Loucks & Lieberman, 1983) and incrementalism in introducing change (Noble, 1985) support the need for introducing innovation in smaller stages, so that teachers are not overwhelmed by too many new things to deal with at one time. However, the question remains as to whether it is possible to support incremental change when, in this climate of federal corporatism, many of the changes are mandated within a politically determined agenda.

The new corporate restructuring of TAFE advocates competency-based, modularised, self-paced, flexible delivery of courses (ACTRAC, 1992; SSAB, 1992). Conference papers these days are full of the new language — equity and access, recognition of prior learning, credit transfer, integration of workplace and off-the-job training, appropriate assessment, accountability of outcomes, flexible delivery, etc. (For example, *Open learning and new technology*, Perth, June, 1990; *What future for technical and vocational education and training?*, Melbourne, December, 1992; *After competence: The future of post-compulsory education and training*, Brisbane, December, 1993). A large number of new ideas, introduced simultaneously in new courses, can be overwhelming to the user. There is also open learning (Atkinson, 1990; Goode, 1993; Keegan, 1990), flexi-mode (Toussaint, 1990a; 1990b), telematics (Foks, 1990), satellite delivery (Davey, 1990; Grant, 1990) and computer based and interactive multimedia training (Burgess, 1994; Docherty & Edgar, 1990; Kruger & Gotts, 1994; Luca, 1994).

There are many references to the plethora of new formats and new delivery technologies to descend on TAFE in Australia during the last few years, but little research so far has been conducted into their impact on lecturers or students. However, there can be no doubt from any number of recent personal communications with lecturers and administrators that the number of apparent enforced changes happening

all at once is awesome. It is not that all of these are new educational ideas, or that TAFE people haven't used them before. But they all suddenly have become highly imperative and everybody has to come to grips with them quickly, and often as concepts isolated from the context of actual development. The most significant curriculum change during the past two years is the requirement for all TAFE training courses to be written in competency-based terms. The difficulties that this is causing throughout the country are well documented (Ahearn, 1993; Hager & Gonsczi, 1993; Lancaster, 1992; Quirk, 1993; Stevenson, 1993; Watson, 1993). An Associate Director (Academic) at one Western Australian TAFE college recently cried in despair, "Why did anyone ever tell them that competency-based training was something different?" (G. Webb, personal communication, 9 October, 1994).

Personal support, staff development and skills training

"One of the greatest problems in educational reform," Fullan wrote, "is that there is too much well intentioned '*ad-hocism*' — the use of single, segmented solutions unconnected or unintegrated with their systemic realities" (1991, p.84). He claimed that well planned staff development is a central theme related to change, and that it should combine pre-implementation training with assistance during implementation, and use a variety of trainers. Marsh and Huberman (1984) listed "personal contacts, inservice days, advisory teacher visits, official pronouncements, news releases and official publications" as dissemination techniques "used to transmit the culture of the new curricula" (p. 57). They added that "acceptance is contingent not only on explicit instruction and training, but also on the presence of reward ... and the goodness-of-fit between users' customary practices and the demands made by the innovation" (p.62). Other writers have reiterated these findings (eg, Huberman & Miles 1984; Louis & Rosenblum, 1981).

Fullan (1991) was insistent that staff development should continue during implementation, because that is when teachers experience the most concerns and doubts. He summarised research findings on staff development (Berman &

McLaughlin, 1978; Huberman & Miles, 1984; Joyce & Showers, 1988; Lortie, 1975; Stallings, 1989) and stated the following:

> One shot workshops prior to and even during implementation are not very helpful. Workshop trainers and program consultants are frequently ineffective. Consultants inside the district are often unclear about their roles. Teachers say they learn best from other teachers, but research shows that they interact with each other infrequently. When teachers are trained as staff developers, they can be very effective in working with other teachers. Teachers also say that they need direct outside help, if it is practical and concrete; and they find those qualities to be the exception rather than the rule. Researchers report that concrete and skill-specific training is effective, but only for the short run (Fullan, 1991, p.85).

Loucks and Lieberman (1983) pointed out that teachers confronted with innovation need to be considered as adult learners, and that they need strategies sensitive to adult needs which encourage openness, trust, reflection and challenge (pp.129-130). They also referred to the Stages of Concern research conducted at the Texas Research and Development Center for Teacher Education (Hall, George & Rutherford, 1977; Hall & Loucks, 1978; Hall, Wallace & Dossett, 1973) to indicate that teachers need to progress through *self-orientation* to *task-orientation* to *impact level* when dealing with change. They claimed that change needs to be sensitive to these concerns (p.130). They further warned that staff development is planned typically for teachers at "the higher stages", and is often irrelevant to teachers functioning at lower stages (p.130).

Godlin Roemer (1991) pointed to the importance of planning and setting up an environment conducive for effective staff development:

> By allowing people from schools and universities to meet in a relatively free space, to discuss education issues away from the pressures of day-to-day life in the schools, away from the administrative hierarchy, free of the turf distinctions that school systems promote, [the project] in its summer sessions can develop a reflective atmosphere, a situation in which thoughtful consideration of practice does not seem like an imposition or a waste of time (p.445).

West (1988) commented that TAFE teachers require staff development to make themselves familiar with new government policies affecting new programs. He wrote that colleges of TAFE are more sensitive to changes in government policy than any other educational institutions (p.9) and need constant staff development to keep up with the changes.

Physical support: Finance, time, equipment, resources

Owen (1973), Rudduck (1973) and Stenhouse (1975) looked at the issue of physical support in the UK as problematic. "The critical problems in evolving an effective system of support for schools" Stenhouse wrote in 1975, "are those of power and authority" (p.181), and these are inseparable from responsibility (p.187). The type of support needed by schools involved in change depends on the amount of autonomy that teachers have. Until the late 1980s teachers in the United Kingdom were highly autonomous but, with the new legislative approaches to curriculum reform, the situation became more like that in the TAFE sector in Australia. In a highly centralised system, the issues of channelling funding, time, equipment and resources into innovation become exacerbated.

In the TAFE sector, lecturers tend to see all power, and funding, resting with the central office, while central administrators see lecturers as trained to cope with teaching matters and able to interpret curriculum change with little support other than the provision of major equipment. There have been attempts during the last six or seven years to introduce a formalised procedure of financial and time commitment as part of the curriculum change process, as mentioned in Chapter 1, but they have not yet led to any permanent or high priority reform.

Owen's (1973) description of a Local Education Authority in the UK well might apply to the ambiguous balance of power and responsibility in the Western Australian Department of Training described in this study. "They have not assumed" wrote Owen, "that teachers could venture on comparatively new ground without *any*

assistance; nor have they truly accepted any sense of *right* in their own participation in local work" (p.104). Rudduck (1973) added that "there are, almost inevitably, problems of authority. What aspires to be a balanced presentation of a curriculum possibility to teacher judgement, is construed [by teachers] as an LEA [Local Education Authority] recommendation or mandate" (p.30).

Stenhouse (1975) made reference to "prosperous American school districts" and large teams of supervisors and curriculum specialists, who both support and control change in schools. In America the area of support comes under the label of 'educational leadership' and the concern in affecting change has been more one of discovering what is needed than one of the logistics of finding time and money, developing materials and staff development workshops. In the WA Department of Training, and in the TAFE colleges, the current transition period sees them hovering between the two approaches, where neither lecturers nor central office staff appear to have the power, authority or resources to put effective support structures in place.

The Minister for Employment, Education and Training, speaking about the new national training reform agenda (Dawkins, 1989b), referred coyly to the commitment of the Federal Government to funding the exercise:

> While the focus of the debate should not be solely on funding, governments must be prepared to examine critically the ways in which they contribute to investment in training. There is no case for reducing the overall commitment of governments to training but, in the context of reforms to the training infrastructure and an increased willingness on the part of industry itself to invest in training, we would be wrong not to review funding methods, their continuing appropriateness and effectiveness (Dawkins, 1989b, p.3).

Teachers will resist change if they haven't access to suitable materials (Fullan, 1991). Someone needs to develop these materials, and the decision on who will do it and in what circumstances will be made at the initiation stage. Loucks and Lieberman (1983) listed the need for physical and human support, for time and peer support, and for not overloading teachers with other activities and responsibilities while they are coping with development and implementation (pp.132-133).

The cost of equipment for TAFE training was dealt with by Hayton (1988) in a study of training for the printing industry. As the rate of technological change quickens in industry, the problem of training workers on a range of 'generic', 'common' and 'specialised' equipment becomes prohibitive. While Hayton suggested that specialised training in machine-specific and firm-specific skills should be the province of industry on-the-job training, he recognised that "TAFE has difficulty in providing the full range of off-the-job training required because of the high cost of some high technology equipment" (p.61). Without systems for adequate funding, and staff skills training in place as part of the role of dissemination, innovation can cause enormous problems for implementers. McBeath (1991) referred to computers not arriving on time for a new Secretarial Skills course in Victoria (p.80), and the problems of NSW TAFE in setting up its million-dollar numerical control plants for Fitting and Machining (p.53).

McBeath (1987) also emphasised the support given by the Australian Conference of TAFE Directors to the "principle that ... cooperation requires rational and coordinated development of learning resources, not only between TAFE Authorities, but also between those involved in the various on and off-campus learning modes" (p.65). Rationalising materials development for use in different learning modes still is rarely considered as an effective method of sharing the time and cost of development.

Leadership and advocacy roles and functions

In the TAFE context, there is no equivalent of the school principal as an advocate and supporter of educational change, nor is there specifically a School Administrator in the North American sense. The organisation of new curriculum ideas and courses is the responsibility initially of a Curriculum Services officer (initiation, design and accreditation), then of the Assistant Director (Academic) and the Study Area Leader (adoption and implementation) and perhaps by Staff Development services (picking up the pieces). Important leadership and management functions shared three ways with little coordination between them is out of step with the findings of research.

Louis and Miles (1990) distinguished between the leadership and management functions in the advocacy of change. Leadership involves articulating a vision, getting shared ownership, and evolutionary planning. Management is concerned with negotiating demands and resource issues with all those concerned and with coordinating and coping with problems. In the arena of curriculum change, these roles don't necessarily have to be those of the principal and, in large secondary schools and certainly in post-compulsory institutions such as TAFE colleges, they rarely, if ever, are.

Miles (1987) wrote of the importance of strong advocacy, need, active initiation and a clear model for proceeding as characterising the more successful innovations. Snyder *et al.* (1992) claimed that administrators, at both the central office and school levels, have to go to centre stage and stay there if school improvement efforts are to succeed (p.409). They go on to describe the importance of the role of the principal as a leader in the change process:

> In the 1980s many of the prescriptions for curriculum implementation have been based on the data generated from the DESSI study [Crandall & Associates, 1983]. For example, Hord and Huling-Austin's (1986) recommendations involve developing supportive organizational arrangements, training, and follow-up activities focused on teachers' problems and concerns, and monitoring and evaluation used as a basis for designing future assistance for teachers. The variable most significantly related to successful implementation was how the principal viewed his/her role (Snyder *et al.*, 1992, p.410).

Berman and McLaughlin (1977) pointed first to the active support of the principal as an important ingredient of innovation success. Hord and Huling-Austin (see Murphy *et al*, 1986) classified principals as initiators, managers or responders. A year later, Hall and Hord (1987) expanded and developed the classification and the requirements of principals' roles into those of responder, manager and initiator (Hall & Hord, 1987). The role of the principal as a leader of change was explored also by Huberman (1983), Huberman and Miles (1984) and Hall (1988).

Snyder *et al.* claimed, however, that leadership in school change is broader than that of the principal. No single role or type of assistance is sufficient to bring about successful implementation of a new program. Fullan's (1991) work supported this, and he cited Berman and McLaughlin (1977), Crandall *et al.* (1983) and Huberman and Miles (1984), in his chapter on the role of the District Administrator in the change process. He saw the District Administrator as the critical source of initiating specific innovations, even when the original source is seen elsewhere (p.197). Adopted changes will not go anywhere, Fullan stated, unless central staff *provide specific implementation pressure and support* (his emphasis, p.198). For effective advocacy and leadership in bringing about change, the District Administrator:

1. tests out the need and priority of the change;
2. determines the potential appropriateness of the particular innovation for addressing the need;
3. clarifies, supports, and insists on the role of principals and other administrators as central to implementation;
4. ensures that direct implementation support is provided in the form of available quality material, in-service training, one-to-one technical help, and opportunity for peer interaction;
5. allows for certain redefinition and adaptation of the innovation;
6. communicates with and maintains the support of parents and the school board;
7. sets up an information-gathering system to monitor and correct implementation problems; and
8. has a realistic time perspective (Fullan, 1991, p.198).

This represents a concept of change built on the Administrator's responsibility and an understanding of what change means to those who experience it. Fullan expanded this concept:

> The effective district administrator is one who constantly works at communication, not because he or she thinks that people are resistant or dense, but because he or she realizes that difficulties of communication are natural and inevitable. The administrator's theory of change will have told him or her that frequent, personal interaction is the key to implementation, and his or her interpersonal skills as a communicator ... will determine the effectiveness of confronting this perennial problem (p.199).

Fullan (1991) claimed that the ideal situation is one in which the power and leadership are shared between the school and the central administration, avoiding central dominance and having regard to the importance of culture of the school (p.204). He cited studies done by: Louis (1989), who concluded that the best mix is one of co-management, coordination and joint planning; LaRocque and Coleman (1989), who found that effective districts combine interactive monitoring with a respect for school autonomy; Fullan, Bennett and Rolheiser-Bennet (1990), whose project had been successful in mobilising large numbers of school and district personnel in voluntary cooperative action to improve learning environments; and Rosenholtz (1989), who saw schools and districts as 'stuck' or 'moving', giving further credence to the concept of readiness, or environments for change. Louis, Rosenblum and Miles (1990) referred to the need for vision, support and pressure from the centres of coordination and orchestration, the congruence of leadership and management ideas together with the empowerment of teachers as the significant ingredients in the two successful change schools which they studied (p.96).

A number of projects described in the literature dealt with 'teacher advocacy'. Projects used teachers as initiators and developers, in the expectation that they would take on a leadership role when they got back to their schools. Fullan (1991) pointed out that there were dangers inherent in that scheme:

> [T]eachers engaged in curriculum development ... must put their advocacy in perspective. If these teachers try to sell a product without recognising that it may not be the most important thing on other teachers' minds, and without being sensitive to the need for other teachers to come to grips with the sense of the innovation, they will be doing exactly what most developers or advocates do — confusing the change with the change process (Fullan, 1991, p.139).

Rudduck's Sheffield study (1991) highlighted similar problems. However, both Rudduck and Fullan see advocacy and leadership in the future becoming the responsibility of collaborative groups of teachers.

Feedback during dissemination and early implementation

Ongoing staff development, Fullan (1991) wrote, frequently is misused or not used. He says that gathering data during implementation and organisational problem solving is crucial:

> The success of implementation is highly dependent on the establishment of effective ways of getting information on how well or poorly a change is going in the classroom and school. The crux of the matter is getting the right people talking together on a regular basis with the right information at their disposal. Getting information about implementation progress needs to be channelled into provisions for additional in-service and assistance, materials support, and possible modification in plans, organizational arrangements, and the innovation itself — in short, carrying out organizational problem solving (p.87).

This point is particularly pertinent to the present study of TAFE curriculum dissemination because, in many cases, students in new courses are officially assessed at the end of the semester or the end of the year, and could be penalised unfairly if their teachers have interpreted the new syllabus documents wrongly. Incorrect interpretation is more likely to be a factor when teachers work in isolation, without the exchange of ideas.

Potential implementers who cannot be involved in the development of new materials need mechanisms in place for exchanging ideas with those who are. They need to be kept informed, and convinced, of decisions taken by the team, and they need in turn to give their ideas back to the developers.

Kennedy's (1985) comparison of two TAFE courses in Western Australia stressed the differential impact of feedback mechanisms used prior to and during implementation:

> There had been limited attempts at providing feedback to the users of the modularised course and limited use of inservice or staff development to accompany the innovation. This, at least, was the view held by users. In the pre-apprenticeship course, however, there were extensive mechanisms for feedback to users built into the design process. Regular evaluation sessions with staff and

> students were held together with special days set aside for staff working on different sites to review the course together. Units of work evaluated in these ways would then be rewritten in line with evaluative comments (p.70).

Boyle (1989) made a case also for communication between TAFE lecturers and occupational practitioners when new courses are implemented, with feedback from industry about the relevance and structure of the new course. This could be via students in apprenticeships or in other employment in industry. Boyle wrote of "a lack of understanding" about education by industry practitioners, and a "perception that educationalists are out of touch with the real world" (p.2). With the introduction of the tripartite Industry Employment and Training Councils, and with less of an emphasis on formal occupational research and analysis, it could be more important than ever for TAFE lecturers to keep open channels of communication with the employers of their students when involved in innovation.

Personal and cultural meaning

Fullan (1991) referred throughout his book to the practical meaning of change and asked that innovators keep in mind the purpose of schools and the purpose of reform. He stressed that change doesn't necessarily imply progress, and that teachers will resist change if it isn't 'practical' or doesn't fit in with their beliefs, or teaching styles. The participants in innovation could resist change for a wide variety of reasons. "Change" he wrote, "is a highly personal experience ... [T]eachers who will be affected by change must have the opportunity to work through this experience in a way in which the rewards at least equal the cost" (p.127).

Cuban (1992) distinguished between *first order* or incremental change and *second order* or fundamental changes, and claimed that it is far more difficult to alter the essential ways in which the school and classroom organisation is put together, and how teachers perceive their roles.

Rudduck became interested in the concept of the transfer of cultural meaning in the late 1970s (Rudduck, 1980). She distinguished between dissemination and diffusion in terms of the transfer of ‘teacher meaning’ (see later in this chapter). A decade later, she had developed the idea of ‘teacher meaning’ to include the need for teachers not only to be active collaborators in the change process, but to be involved in critical reflection of their own and their colleagues’ values, fears and behaviour in the face of curriculum innovation. This, she stated, is the only way in which we really can get to grips with the real meaning of change and, by implication, its significance for disseminators.

In fact, Rudduck was not interested in disseminators, as separate or remote developers, change agents, or initiators of reform. Change can only occur if and when teachers become their own interpreters of and collaborators in what change means in terms of their own and their pupils’ behaviour in the reality of the classroom. Change can only occur if and when teachers believe that change is necessary, and they can interpret it in terms of their own philosophies and values and needs. While much of her own work with the Schools Council Curriculum Projects in the UK was from the perspective of a disseminator, she concluded that successful dissemination was impossible without the involvement and ‘sense of ownership’ of the teachers becoming paramount. Rudduck’s (1991) and Stenhouse’s (1975) ideas on teacher research and partnership supervision are dealt with later in this chapter.

Olson (1980) referred to the work of Sieber (1972) and Doyle and Ponder (1977) on the effect of personality types in the effectiveness of implementation. The typographies referred to were developed from the change literature and could be hard to reinforce by field research. However, Olson stated that it would be far more useful to think of how teachers personally construe their work in relation to innovation. He wrote that the dissemination process should be sensitive to teachers' constructs when encouraging them to adopt new things in the classroom. These constructs are what gives meaning to change, and successful change is based on teachers coming to grips with the ambiguities of having to change their roles and their interpretation of things

with which they were familiar. “The notion of minimising ambiguity ... is one way of conceptualising how schools maintain stability in the face of conflicting pressures from outside and uncertain technique” (p.8). Based on his research on the British Schools Council Integrated Science Project, he defined six areas of ambiguity about which teachers need to make decisions when confronted with curriculum change:

> When is the job done and how do I know?
> Who is in charge here? (Diverse role expectations)
> Letting the side down (Marginal roles)
> Who is with us and who is against us? (Institutional support)
> Is this project going to be a magic carpet? (Career versus commitments)
> Is this what they want us to do? (Multiple goals of education) (pp.8-10).

Huberman (1983) saw the change process as impinging on an already overloaded workload of teachers, suggesting that curriculum writers need to be aware of the classroom ‘press’ factors which affect the daily work of teachers:

- The press for *immediacy and concreteness*: Teachers engage in an estimated 200,000 interchanges a year, most of them spontaneous and requiring action.
- The press for *multi-dimensionality and simultaneity*: Teachers must carry on a range of operations simultaneously, providing materials, interacting with one pupil and monitoring the others, assessing progress, attending to needs and behaviour.
- The press for adapting to *ever-changing conditions or unpredictability*: Anything can happen. Schools are reactive partly because they must deal with unstable input — classes have different ‘personalities’ from year to year; a well-planned lesson may fall flat; what works with one child is ineffective for another; what works one day may not work the next.
- The press for *personal involvement with students*: Teachers discover that they need to develop and maintain person relationships and that for most students meaningful interaction is a precursor to academic learning (pp.482-483).

The ‘presses’, or concerns, listed above must be considered during the development and dissemination of new ideas, and allowances must be made for how teachers are going to fit them into their professional practice.

There are other issues in the research literature which could affect the process of curriculum change in different circumstances, but the eight issues discussed in this section help to explain the reality of the practical curriculum dissemination experiences encountered by the researcher in the following chapters. Most of these more complex concepts emerged at the survey stage of this research (Chapter 5) and were then built into the design of the dissemination strategy (Chapter 6).

Another important issue in the literature which needs to be explained in the context of this research is the dilemma of the conflicting demands of top-down and bottom-up curriculum change processes. The next section explores the curriculum dissemination process and examines it critically in relation to the expectations of institutional and government mandated change alongside that of the need for teacher involvement and collaboration in the change process. This is set against a background of the changing meaning of the word 'dissemination' since the 1970s.

Dissemination as educational management or teacher meaning?

Until the early 1970s, the terms *dissemination* and *diffusion* were used virtually interchangeably, and referred to the spread of new knowledge or new techniques. The words and the concept came originally from the study of innovation in the fields of agriculture and medicine (Rudduck & Kelly, 1976, p.11). Diffusion, probably the more commonly understood word in the 1960s, was seen as "the spontaneous, unplanned spread of new ideas" (Rogers, l983), and it typically involved a two-way communication of information, effected by an exchange of ideas between individuals (Marsh, 1986a, p.104). Dissemination came to mean planned information giving, and generally was interpreted as a top-down phenomenon. Kelly (1982) drew on House's (1974) social interaction theory to make the distinction clearer. Kelly stated that, with 'rural' or 'household' innovations, ideas are communicated by a kind of contagious diffusion brought about by personal contact between individuals. This is the way in which teachers interact when implementing innovation. This is diffusion. With 'urban' society, on the other hand, barriers created by social status are the most significant

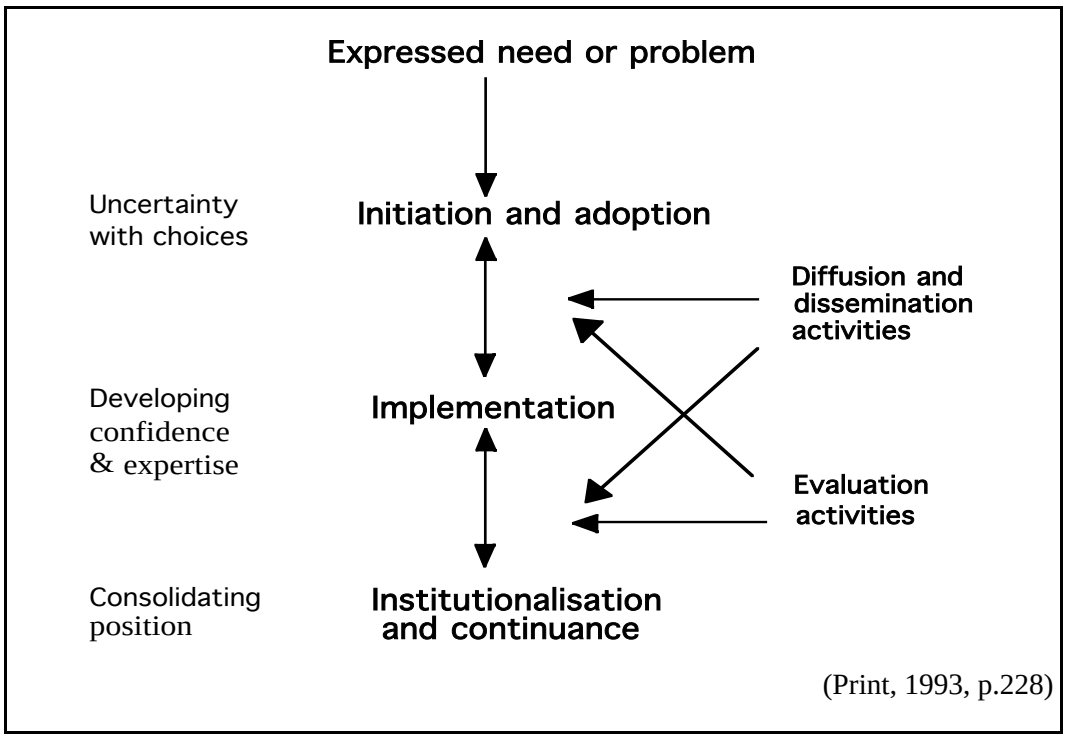
because they inhibit social interaction. This is ‘entrepreneurial’ innovation, which Kelly associated with top-down administration. This is dissemination, and carries with it all the problems of entrepreneurial social interaction (p.135).

Interest in dissemination sharpened in the 1970s, when it became evident that, in spite of massive investment of time, money and ideas poured into innovative curriculum development, very little significant change had occurred at school level (Dynan, 1983; Fullan 1972; Marsh 1986a). Although researchers by that time knew something of the nature of dissemination and diffusion, the process in the world of practical curriculum development had been *ad hoc* and limited in scope and duration, unsystematic or, at times, completely nonexistent (Dynan, 1983, p.62). The response was that, during the following decade, dissemination began to be seen as a specific marketing technique, with a narrow focus on tactics and guidelines. The word *dissemination* was increasingly identified with this process, while *diffusion* became associated with the concept of a user-centred, unmanaged process of information sharing.

Rudduck (1980), however, wrote that, by replacing the earlier term diffusion with dissemination, we lost access to a theoretical framework which might have helped us to make better sense of the process of curriculum change. We lost something of the cultural perspective, the concept of transfer of meaning of the product to the user, by which the user could understand and better accept it.

Print (1993) saw dissemination as a series of management techniques spanning the initiation/adoption and implementation stages of curriculum development. He suggested that factors such as “access to information, alternative innovations, central administrative support, funding availability, role of change agents, community pressures and State government positions” affect the rate of change within schools (p.229). These are predominantly management issues. Print’s schematic representation of the place of managed dissemination in the change process is shown in Figure 2.3. He cites Fullan, (1982) as his major source.

Figure 2.3 Educational change process



(Print, 1993, p.228)

An issue relevant to this study is the interaction between dissemination and implementation and the difficulty of studying the former except through the latter. Fullan (1991) was aware of this anomaly:

> The relationship between initiation and implementation is loosely coupled and interactive. The process of initiation can generate meaning or confusion, commitment or alienation, or simply ignorance on the part of participants and others affected by the change. Poor beginnings can be turned into success depending on what is done during implementation. Promising startups can be squandered by what happens afterwards (p.64).

While Fullan (1991) did not use the terms ‘dissemination’ or ‘disseminator’, he approached the issue from a management perspective, looking down, so to speak, to the participants. He contended that “the fundamental goal for planners is to achieve a feel for the change process and the people in it” (p.107). He warned planners of change against making certain assumptions. Below is an abbreviated version of his ‘do and don’t’ list for planners and initiators of educational change.

1. Do not assume that your version of what the change should be is the one that should or could be implemented. ...One of the main purposes of the process of implementation is to *exchange your reality* of what should be through interaction with implementers and others concerned.
2. Assume that any significant innovation ... requires individual implementers to work out their own meaning. ... [A]ffective implementation is a *process of clarification.*
3. Assume that conflict and disagreement are not only inevitable but fundamental to successful change. ... Smooth implementation is often a sign that not much is really changing.
4. Assume that people need pressure to change ... but it will be effective only under conditions that allow them to react, to form their own position, to interact with other implementers, to obtain technical assistance, etc. ... [R]elearning is at the heart of change.
5. Assume that effective change takes time. It is a process of 'development in use.' ... [I]mplementation occurs developmentally. ... Significant change in the form of implementing specific innovations can be expected to take a minimum of two or three years.
6. Do not assume that the reason for lack of implementation is out-right rejection of the values embodied in the change, or hard-core resistance to all change. Assume that there are a number of possible reasons: value rejection, inadequate resources ... insufficient time ...
7. Do not expect all or even most people or groups to change. The complexity of change is such that it is impossible to bring about widespread reform ...
8. Assume that you will need a plan that is based on the above assumptions and that addresses the factors known to affect implementation.
9. Assume that no amount of knowledge will ever make it totally clear what actions should be taken. Action decisions are a combination of valid knowledge, political considerations, on-the-spot decisions, and intuition.
10. Assume that changing the culture of institutions is the real agenda, not implementing single innovations. (Based on Fullan, 1991, pp.105-107)

Significant interest in the role of the user as a collaborator and partner in curriculum change came mainly from the UK. Kelly (1982) referred to the Schools Council Curriculum Projects in the UK to distinguish between the centre-periphery approach of central development and planned dissemination and those which encourage initiatives from the user (p.133). The former was the model used in the early 1970s projects, but its inadequacies soon became apparent:

> There is a wide gap between the ideas of a project held by its central planners and the realities of its implementation. ... It has proved impossible to get across to teachers the concept of the project, the theoretical considerations underlying it,

> in such a way as to ensure that these were reflected in its practice. And so a gap emerges between the ideals and the realities, a gap that in some cases is so wide as to negate the project entirely, at least in terms of the conception of it by its planners (p.133).

Later efforts to plan dissemination strategies carefully in advance as part of the Humanities Curriculum Project (Rudduck, 1973) brought to light further problems regarding teacher understanding and acceptance. In stressing that teachers needed to be won over to cooperate in the change effort, Kelly (1982) wrote that it is:

> ... necessary for more to be done than the mere provision of resources and in-service support for teachers. Teachers will need to become committed to it, an ideological change will need to be promoted, if they are to be expected willingly to adapt their methods and approaches to meet the demands of the new work (p.137).

Kelly wrote that teachers and planners must be brought closer together in the dissemination process. He used MacDonald and Walker's (1976) term 'curriculum negotiation' to describe the process of teachers working with planners to interpret and elaborate curriculululum ideas into educational terms.

Marsh and Huberman (1984) developed this concept. Using Rogers and Shoemaker's (1971) authority-driven innovation model, they reiterated that the five functions of dissemination defined by Rogers and Shoemaker were divided between superordinate and subordinate groups. Knowledge, persuasion and decision, they argued, are the functions of the dissemination administrators, while communication and action are the concern of the implementers. They contended that as many top-down authority driven projects have been successful as have teacher driven bottom-up approaches. Top-down projects, indeed, continue to be the norm. Drawing on data from the DESSI study ('dissemination efforts supporting school improvement') (Crandall *et al.*, 1983) and a 12-site field study by Huberman and Miles (1982), Marsh and Huberman (1984, pp.62-63) point out that in both 'inside-in' and 'home-grown' projects the main decision makers were district level administrators (pp.62-63). They refined the data

further to conclude that "we can have bottom-up levels *within* top-down administrations, or top-down levels within bottom-up administrations" (p.63).

"Curriculum dissemination is a complex and elusive term", wrote Marsh and Huberman (1984, p.53). They drew on the work of Haenn (1980), Rudduck (1980), and Rudduck and Kelly (1976) to propose an overview:

> It can be restricted to mean the production and marketing of instructional materials or can be broadened to encompass the *resource base* (data, products and technical expertise), the *linkage mechanisms* binding client groups to resource bases, and the *delivery arrangements*, including administrative leadership and management, whereby such inputs feed into classroom use. Other analysts are more process oriented, focusing more on the knowledge-transfer process and the setting characteristics conducive to widespread use (pp.53-54).

Marsh and Huberman (1984) declared that they were looking at dissemination as a relatively prescriptive, top-down process, as this is the norm in Australia and the USA (p.60). They stated that, as the centralised and hierarchical model of dissemination can be expected to survive, it is the more important to delineate its core feature (p.65). However, they recognised the importance of integrated power links between 'superordinate' and 'subordinate' groups and the need for teachers to find their own meaning.

It is very difficult for those outside the schools to improve the quality of provision within them (MacDonald, 1991) and the research emphasis in recent times has tended away from dissemination as a top-down approach to explore more collaborative arrangements. "Twenty five years ago," MacDonald stated, "we thought differently". Twenty five years ago we thought that telling people what to do was enough to bring about educational change in schools:

> We thought then that the combination of money and good ideas, invested in external agencies, would quickly and easily transform our schools in line with the post-war transformation of our economy and our social life. It was not to be. There are no easy solutions. ... It is the quality of the teachers themselves and the nature of their commitment to change that determines the quality of teaching and

> the quality of school improvement. Teachers are, on the whole, poor implementers of other people's ideas. ... Their understanding, their sense of responsibility, their commitment to the effective delivery of educational experience for their pupils, is significantly enhanced when they own the ideas and author the means by which ideas are translated into classroom practice (p.3).

Marris (1975) stressed that no-one can resolve a problem on behalf of another. He warned that, "when those who have power to manipulate changes act as if they have only to explain, and when their explanations are not at once accepted, [they] shrug off opposition as ignorance or prejudice, [then] they express a profound contempt for the meaning of lives other than their own" (p.166).

Here then is the dilemma. Dissemination as a top-down, management tool or leadership strategy is alive and well, entrenched in the schools and TAFE systems, and strengthened by the new corporate functionalism of the current reform movement. Concurrently, teachers are resistant and unhappy, struggling with the meaning of change to themselves and their pupils and the implications it has on their lives.

A number of the writers on the issue of dissemination concluded on a similar note of duality. Some wrote specifically of the importance of a process that consciously brings initiator and teachers together in joint development. The general conclusion was that any model of effective dissemination must recognise the potential for a two-way process of initiation, decision making and support from administrators, on one hand, and awareness raising, joint ownership, collaboration and involvement from the users, on the other. Such an approach is reflected in Stage 3 of this research (see Chapter 6), which involved the application of a collaborative development model.

Dissemination within the strategy used in this research refers to the central responsibility of the 'change agent' for presenting the innovation to the users in a way that assists them to *understand* and *accept* it, and that makes it easier to implement it in a way that gives it meaning for themselves and their pupils. In the TAFE sector, where curriculum change is initiated either at State or national level, some method

must be used to let the lecturers in the colleges discover, first, what is required of them and, second, how they can share in the interpretation and development of the innovation and translate it into classroom practice. Thus, the strategy also needs to include a place for diffusion or unmanaged, spontaneous information sharing before it can be successful.

The theories of change, and the nature of dissemination in particular, are far from fully developed. The amount written in the field testifies to its importance, and many significant factors have been defined. There exists a body of conventional wisdom (Fullan & Miles, 1992), but much of it consists of contradictory evidence, stereotypes, maxims and some propositions which are just wrong (Miles, 1993, pp.214-215). There is not a consistent definition or application of the curriculum dissemination process. American scholars approach it more in terms of management and educational leadership. Those in the United Kingdom tend to approach it as teacher meaning and action research, which also includes students' perspectives.

A definition of dissemination requires both management and teacher perspectives. It needs to include the meanings of both dissemination and diffusion. It needs to fit comfortably into top-down, prescriptive, political and technological frameworks, and bottom-up, humanistic and user-centred environments. It needs to accommodate mandated reform and spontaneous and creative ideas, as well as finding a place for personal reflective interpretation of directives. It needs to concern management, teachers and students. Dissemination should not have to fit into predetermined stages of curriculum change, but should exist as a central part of the change process, subsuming and being subsumed in all parts of the process.

The definition of dissemination developed for this research does not come specifically from the literature, although it is derived from it. Dissemination as the "process of informing teachers about new or revised curriculum ideas, so that they *understand* and *accept* the innovation" implies that they are informed (by management), that they understand it in their own terms (teacher meaning) and that they accept it as

worthwhile to pass onto their students (students' needs). The definition also recognises that the question of how this is done, how new ideas and practices spread from their point of origin and gain widespread adoption, is central to all successful educational change.

The two viewpoints on dissemination and change discussed in this section, namely, educational management and teacher meaning, have their roots in distinctly different perspectives of educational theory. The next section examines briefly the theoretical perspectives which underpin curriculum expectations and practice in TAFE and which, consequently, influenced the direction of the present research.

Theoretical perspectives

There are several theoretical perspectives underlying this research. TAFE curriculum change is typically technological, top-down, authority based and prescriptive. Most often curriculum development is seen as 'reform', to use MacDonald's (1991) term, or a 'mandate', to use Loucks and Lieberman's (1983). Even when the content of mandated change can be perfectly acceptable to teachers in principle, coming as it does frequently from State or federal government directives, "the actual implementation of these ideas is far more time-consuming, costly, and energy depleting than policy makers usually anticipate" (Loucks & Lieberman, 1983, p.138). Those who mandate educational change most often have a technological view of the implementation process: "Decree it today, it will be implemented tomorrow with short intensive training, and we can hold people accountable for its outcomes at the end of the school year" (Loucks & Lieberman, 1983, p.138). In the TAFE context, there is rarely the "short, intensive training", but Loucks and Lieberman could have been describing curriculum dissemination of TAFE curriculum when they described the technological process common in the USA at that time:

> [I]t is assumed that people just need exposure and minimal training to implement these new and better ideas. The technological view focuses on the innovation

> itself and pays scant attention to the process of change, the politics, or the people. When improvement is viewed from this perspective, the *idea* is critical. We ask such questions as: Is the innovation well developed, with materials, activities, strategies that substantially change the teacher-pupil relationship? Is it a set of techniques to replace existing ones? Does it contain a new set of assumptions about how to work? (p.127).

TAFE sets its objectives as a provider of recruits for industry, and it fits in with its self concept of 'entrepreneurialism' as it strives to please business and industry and reflect their attitudes. This is a technological view. The technological view, mirroring the stand point of the TAFE system, is evident in part of this study, particularly the questionnaire survey. This survey reflects the principle considerations to change expected by TAFE, and encourages a descriptive and measurement-based response.

Winning (1993), writing about philosophical assumptions in TAFE curriculum change, stated that the *empirical-analytic* paradigm has been dominant in Western culture during this century. The way in which this perspective considers "explanatory and technical knowledge ... of primary significance" is illustrated in Winning's comments:

> The dominant philosophical position and paradigmatic framework in which emerging VET [vocational education and training] curriculum policy fits is that of instrumental rationalism viewed through an empirical-analytic paradigm. The curriculum policy is driven by economic rationalism. The major goal of economic rationalism is to ensure that human capital contributes to national economic goals. Any notions of individual or community well-being come only in terms of the economy. The curriculum strategy of CBT [competency-based training] is driven by a belief in accountability, measurement and external control. Supporters of these premises view the world in terms of positivistic science which believes that everything can be understood and examined if it is made into smaller and smaller discrete pieces which can be measured (p.110).

She contended that TAFE curriculum development comes from positivistic science, which is attempting to control education and society through master-minding the behaviour of its products. Winning's criticism comes from a social reconstructivist and humanistic perspective.

The humanistic perspective to curriculum reform is reflected in much of the curriculum literature from overseas. The work of Olson (1980), Rudduck (1991) and Stenhouse (1975) in the United Kingdom and Goodlad (1975) and Sarason (1971) in the United States carries a strong 'cultural' or 'humanistic' perspective, which is also reflected in part of this research, in particular the third section dealing with the application of the strategy (see Chapter Six). This perspective is concerned with how teachers (and students) see and interpret their part in change, how they construe their roles, and how they deal with personal fears and ambiguities. The cultural perspective "takes into account the complexity of classroom life and the implications of change for the individual and the school (Loucks & Lieberman, 1983, p.128).

A humanistic perspective is not lacking in the TAFE system. Winning (1993) wrote of allowing access to higher education, flexible pathways within careers, possibilities for community input to programs, increased variability of individual process, the significance of the individual's experience, as all being present within the empirical-analytical paradigm. TAFE lecturers often speak caringly of their students, and reflect on the meaning of their teaching roles. These attitudes were apparent in both the pilot study and in the application of the model, and the research methods used encouraged open discussion, personal reflection and group interaction.

Loucks and Lieberman (1983) also examined 'the political view' whereby change is affected by the vested interests of different groups (pp.127-128). This perspective was referred to in Chapter 1 in the description of the structural and organisational changes which have affected TAFE in Western Australia, and also in the quotations from McNeil and Cuban earlier in this Chapter. There are similarities in the 'political view' and the technological view, but the political approach is able to elaborate on and explain more easily the problems which occur in the linear, directive line taken typically by the bureaucrats.

Berman and McLaughlin (1978) interpreted classroom adaptation of innovations as a political act, whereby teachers seek their own values and sponsorship, so to speak, in

the new materials and interpret and change them even as they themselves are being changed by the innovation. The organisational influences on dissemination can also be seen in terms of hegemony and power. Weaker groups seek to empower themselves by resenting and resisting change thrust upon them from above. Thus studies in the field of educational change, including the present one, perforce take on a sociological or political perspective.

These three perspectives, the technological, the humanistic and the political exist side by side in this research. Loucks and Lieberman (1983) wrote that "studies from these three perspectives have added to understandings of the impact of the new practice itself, of the interactions between the innovation and groups within the new setting, and the dynamics of teachers as they confront and use the new ideas" (p.128). In this study, the three perspectives cannot be separated easily. Each serves different purposes, bringing out different aspects of reality and meaning of the dissemination process in the TAFE sector, and adding to a holistic reality of what is occurring.

Conclusion

In this chapter, there have been explored five major topics which impact on the research which is described and analysed in the chapters which follow. The history of the development of educational change theory since 1970 was examined first, concluding with the proposition that dissemination theory is not developed fully but still is in the process of evolving. This is reflected in the present research in the simplistic approach of management to the process of change, in the confusion and frustration experienced by lecturers coping with new curricula and in the unexpected slowness of the dissemination strategy described in Chapter 6 to take shape and direction.

Second, the meaning and role of dissemination within the educational change process were examined. This is important in this thesis because of the level of confusion, both in the literature and in practice, about the specific nature of dissemination and its place

in the overall process of change. The application of the dissemination strategy, described in Chapter 6, indicates how difficult it is for lecturers to understand that dissemination tactics and strategies need to involve them as deeply as possible to be successful.

Third, eight important issues found in the literature were discussed in relation to TAFE and to the present study. These become the sub-themes of the research and are referred to constantly throughout the thesis.

Fourth, the concepts of top-down and bottom-up curriculum development were examined in relation to the difficult balance between mandated change and the place of teacher meaning in the change process. Again these concepts pervade the thesis, and the conclusions point to the need for a practical compromise to be found between these two perspectives, if dissemination practice in TAFE is to be successful.

Finally, the review discussed the theoretical perspectives which have influenced the philosophy and practice of TAFE in Australia as well as the direction and findings of this research. The tension between the technological, the political and the humanistic perspectives is a central theme in this research.

The next chapter describes the research methods used and how they were developed, validated and applied in the TAFE setting.

Chapter 3

The method

We believe that any method that works — that will produce clear, verifiable, replicable meanings from a set of qualitative data — is grist for our mill, regardless of its antecedents.
(Miles & Huberman, 1984, p.17)

Chapter 1 described the situation in the Technical and Further sector of education in Western Australia in terms of a serious deficit in the practice of curriculum dissemination. It defined the problem for the present study in terms of three questions which need researching:

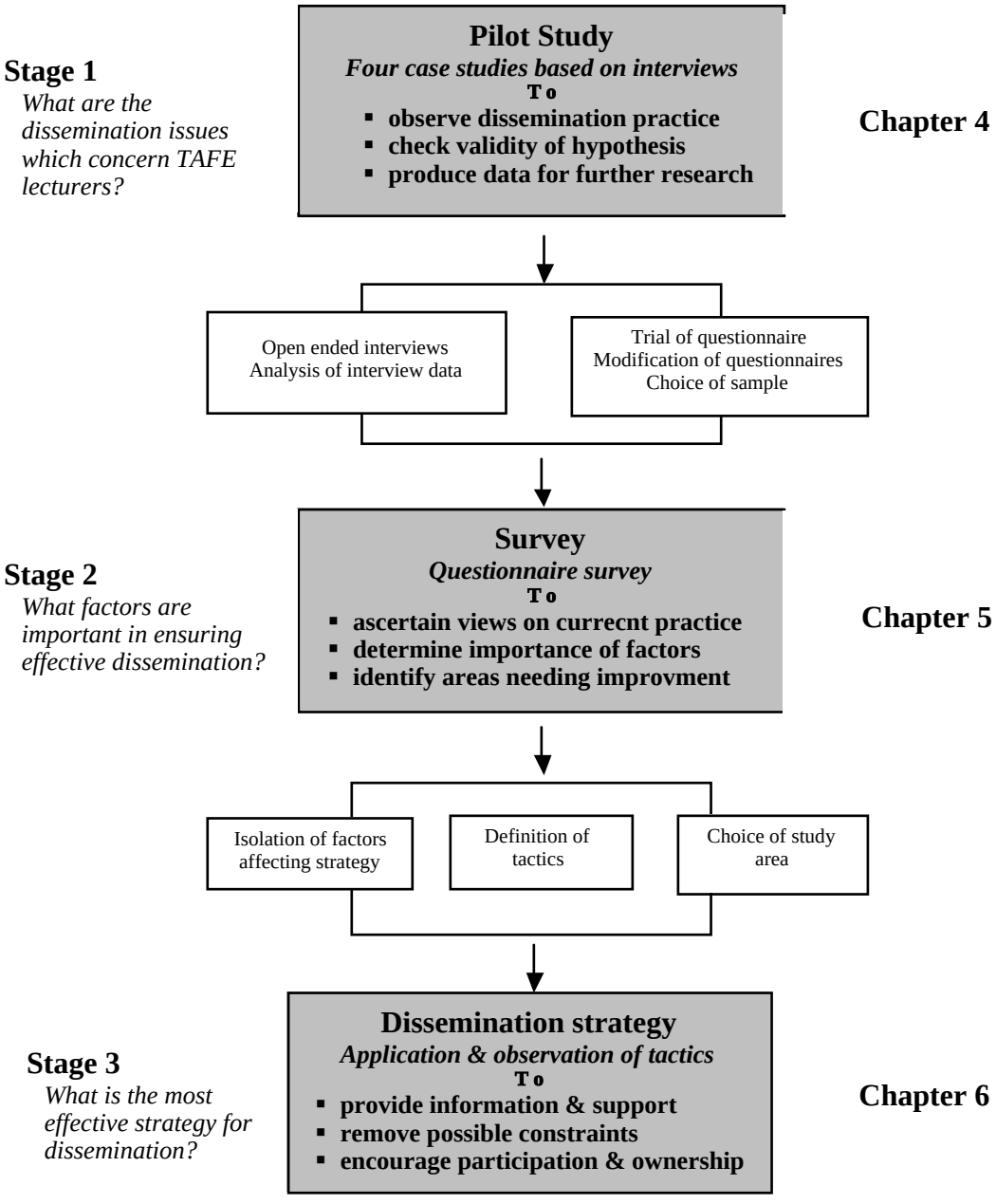
1. What are the issues which concern users and disseminators in regard to curriculum dissemination in TAFE?
2. Which factors are important in ensuring effective curriculum dissemination in TAFE?
3. Based on the factors identified, can an effective strategy be devised for curriculum dissemination in the TAFE context?

Chapter 2 gave an overview of published research and comment on topics relevant to the three defined research questions, emphasising the lack of research in the area of curriculum change in technical and vocational education and indicating the problems of the change process in the TAFE sector. The chapter explored the concepts of dissemination and their place in educational change theory and discussed some of the problems defined in the research literature, thus setting the scene for the present research.

This chapter describes briefly the literature on research methods and methodologies relevant to this study, the methods used to explore the three questions outlined above, the way in which these methods were structured, with each stage building on the previous one, and the justification for research design decisions at each stage.

The research was designed in three stages consisting of, first, a pilot study involving interviews about the dissemination concerns of lecturers and administrators, second, a questionnaire survey of TAFE lecturers about their ideas on the relative importance of dissemination tactics used in curriculum innovation and, third, a case study of the application of a new dissemination strategy to a TAFE curriculum project. Each stage of the research provided data on which to design and validate the next. Stage 1 is described in Chapter 4, Stage 2 in Chapter 5 and Stage 3 in Chapter 6. (See Figure 3.1).

Figure 3.1 Stages in the research



Research methodology literature

Three methods of research were used to gather data for the three stages of this project:

1. case studies based on interviews, using semi-structured interview schedules
2. a questionnaire survey, using *preferred* and *actual* situation statements, administered to TAFE lecturers in the process of implementing change
3. application of a collaborative development model through a dissemination strategy using tactics to increase lecturers' involvement in a chosen curriculum setting.

The research methodology overall can be described best as a disciplined enquiry, based on a variety of methods and data gathering techniques, analysed and interpreted according to the demands of the three research questions defined in Chapter 1 (Shulman, 1988). In justification of non-statistical, non-experimental research methods, which much of the present research project utilises, Miles & Huberman (1984) claimed that "we believe ... that any method that works — that will produce clear, verifiable, replicable meanings from a set of qualitative data — is grist for our mill, regardless of its antecedents" (p.17).

In this section four methodologies used in the research are explored. These are the case study method, survey research, the use of *preferred* and *actual* questionnaire in the survey, and the collaborative development strategy.

Case study method

The case study is not a specific technique, but rather a way of focusing on a 'bounded' situation to discover patterns which have meaning to researchers and readers. Stake (1988) wrote that case study research involved "working on a conceptual structure, building up an understanding ... drawing some conclusions yet leaving room for readers or listeners to make up their own minds" (p.255). Stake wrote that the crux of the definition of case study is that of "having some conception of the unity or totality of a system with some kind of outlines or boundaries" (p.255).

By ‘bounded’ system, he meant one with delineated boundaries, a self contained unity, within which observations could be made and conclusions drawn. It is not merely the telling of a story. “What the researcher looks for are the systematic connections among observable behaviours, speculations, causes, treatments” (p.255). The focus of attention is the case, not the whole population of cases. It concentrates on the uniqueness of individual cases and generalises beyond particular instances. The search is for an understanding of the particular case in all its idiosyncrasy, in its complexity. “The case is something deemed worthy of close watch. It has character, it has a totality, it has boundaries” (p.256).

The case study's unique strength is its ability to deal with a full variety of evidence. “Case study has a distinct advantage when: a ‘how’ or ‘why’ question is being asked about a contemporary set of events over which the investigator has little or no control” (Yin, 1984, p.20).

Yin (1984, p.22) claims that the skills for doing good case studies have not yet been defined. Case study research often uses anthropological or sociological field methods, sometimes consisting of planned observations in natural settings and use of interviews, qualitative analysis and narrative reports. But they don’t have to. Stake (1988) wrote that some case studies are highly impersonal and statistical. He also warned against assuming that case studies are representative, although some researchers have claimed that unique case studies help us to understand more typical cases.

The purpose in using case studies for the pilot study in this project was “seeking sweet water” for educational research (Stake, 1988). In Yin’s hierarchy of “exploratory, descriptive or explanatory” case studies, the pilot study described in Chapter 4 belongs to the first category. The researcher was seeking confirmation of the extent of the problem outlined in Chapter 1, with the hope of extracting issues on which to build further research. Stake quoted a letter from a friend: “When I want to find out something important for myself I often use the case study approach” (p.262).

There was no documented evidence that dissemination was a problem in the TAFE sector in Western Australia, and the case studies in the pilot study presented a way of gathering this evidence. The 'bounded systems' consisted of four curriculum innovations and the method used was that of semi-structured interviews. The patterns and links made in the case studies became the basis for the second part of the research, the questionnaire survey.

The application of the dissemination strategy described in Chapter 6 is also a case study, but more explanatory than exploratory, to use Yin's terms. It involved setting up a strategy and observing what happened to those affected by it. It explains 'what' happened in a unique, bounded situation and attempts to explain 'why'.

Survey research

Borg and Gall (1983) claimed that studies involving surveys account for a substantial proportion of the research done in the field of education. Data collection tools are used in survey research "to obtain *standardised* information from all subjects in a sample" (p.406). The conditions of administration, they wrote, must be as similar as possible for each subject in the sample (p.406). They discussed a wide range of data gathering techniques, but the one most relevant to this study is the *cross sectional survey*, using a *stratified* sampling technique, designed to collect information from a predetermined population (p.406). These sampling techniques were used in both the pilot case studies (Chapter 4) and the questionnaire survey (Chapter 5). Borg and Gall stressed the importance of defining the objectives to be achieved by questionnaire surveys before setting up the design, and wording and constructing them to suit the audience and environment which it is targeting (pp.415 & 418).

They wrote of the level of saliency of the questions to the sample, claiming that salient studies should produce a return rate of 77%, while 66% can be regarded as possibly salient and 42% as non salient (p.417). They do not consider other factors which might affect the return rate. They advised that, when exploring a potential idea for research,

several specific categories of people within a professional group could be sampled. This occurred in the pilot study interviews in this research. They also warned about busy educators depositing questionnaires “in the waste basket with little more than a quick glance” (p.418), which could have accounted for the number of survey questionnaires which were not returned (see below).

Open form questions were used in both the pilot study interviews and in part of the survey questionnaire. Borg and Gall (1983) suggested that little research on the relative merits of closed and open questions has been reported, but that evidence (Bradburn, 1982, for instance) suggests that the two formats produce very similar information. Where quantification and analysis are required, closed form questions are recommended (p.419).

The technique of determining closed questions by first asking open, exploratory questions with a smaller sample was recommended by Borg and Gall (p.419). This was the technique used to develop the survey questionnaire from the case studies. The case study interviews established the ‘reality’ and the ‘bounded system’ (see Stake above), and the responses then were subjected to content analysis in order to construct closed, multiple choice items for the survey.

Another point made by Borg and Gall concerned engaging in research which could be regarded as threatening (p.420). The interviews and the questionnaire used in this study were designed from the point of view of the lecturing staff, the users of curriculum innovation. They were the chief focus of the study. However, the research itself could have been seen as threatening at management and coordinator level. It was important to keep this ‘threat’ in perspective, by continuously informing senior management of the findings, consulting with curriculum staff and being seen by Study Area Leaders and Assistant Directors (Academic) to be constructive rather than destructive of their efforts. As Borg and Hall stressed, the research loses credibility if it appears to be about people failing in their jobs (p.420).

The preferred and actual questionnaire

The instrument used for the survey was based on the Individualised Classroom Environment Questionnaire (Fraser, 1990), School-Level Environment Questionnaire (Rentoul & Fraser, 1983; Fisher & Fraser, 1990), and the School Organisational Climate Questionnaire (Dellar & Giddings, 1990; 1991). The school and classroom environment questionnaires were developed from earlier instruments applied to school and work environments (Moos, 1979; Walberg, 1979), and were used to explain, amongst other things, an organisation's response to innovation and change. They were designed for use in secondary schools to assess the perceptions of teachers and pupils about the *actual* and *preferred* environments, and to identify groups of factors in which changes could be made. Fraser (1990) saw "paper-and pencil perceptual measures" as an economical way of gathering data on perceptions over a period of time (rather than once-off techniques of observed behaviour), and as involving 'pooled judgements' and broad based 'determinants of behaviour' (pp.7-8).

Dellar & Giddings (1990) described economy of use as one of important considerations for the development of the School Organisational Climate questionnaire. It was considered important that, with time pressures facing the classroom teacher, the instrument should require a relatively short time to complete. It is further described as an instrument that "acts to physically separate the *actual* and *preferred* forms of the questionnaire for the respondent, and ... seeks additional information about the respondent that might be useful for analysis of the data" (p.4). The mean scores for the *preferred* and *actual* responses are calculated and a statistical analysis is done. The smaller the discrepancy between the *actual* and *preferred* factors, the greater the satisfaction with the existing situation. Larger discrepancies indicate dissatisfaction and these discrepancies can serve as targets for school improvement intervention.

Like the School Organisational Climate questionnaire, the instrument used in this study was custom made, developed from a set of factors determined from the pilot study

interviews. Unlike the school and classroom environments questionnaires, it was not extensively tested for internal consistency, discriminant validity or test-retest reliability, but the factors were tested for meaning and appropriateness of concepts with a representative pilot group. See later in this chapter for a description of the design of the *preferred* and *actual* questionnaire and the reasons for selecting it for part of this study.

Collaborative development strategy

Stenhouse (1975) claimed that "effective curriculum development of the highest quality depends upon the capacity of teachers to take a research stance to their own teaching" (p.156). Action, and reflection on their actions, are the responsibility of teachers in understanding change. They improve their performance by becoming self-conscious. This interpretation of teacher research informs the third and final stage of this study. Stenhouse also wrote of the need for a 'coach', or a consultant observer to help teachers in their reflective process. In the application of a collaborative development strategy described in Chapter 6, the researcher assumes something of that role.

Linked to Rudduck's (1991) writing on teacher ownership of and collaboration in curriculum change is the work which she did with May and Sigsworth (May & Sigsworth, 1982; Rudduck & Sigsworth, 1983; Rudduck & Sigsworth, 1985) on the methodology of teacher research and partnership supervision. The techniques developed were used primarily in the supervision of teaching practice, but Rudduck included them in her book *Innovation and change* (1991) with the implication that teachers' critical reflection of their roles in curriculum change helps them, by "constructing their landscapes of consciousness" (p.97), to discover their own meanings in the change process. She justified the techniques of teacher research on teachers' needs as follows:

1. To try to understand the foundation of their own educational values.
2. To understand, in relation to these values, what change means for them and to be clear what the basis of their individual commitment is.
3. To be prepared to tackle issues of value collaboratively, for unless there is exploration of values and purposes in working groups, coherent whole school change is unlikely to be achieved (p.89).

The concept of teachers working in partnership with academics was seen as a way of researchers assisting teachers to break out of set daily routines and view their teaching with new eyes. "An outsider is in a good position to help experienced teachers to loosen the hold of habit" (p.111). She explains this thus:

> ... practitioners, unlike academic staff in universities, do not have research as part of their contract and there is no specific time allowance to support the research enterprise.... Partnership supervision ... rests on the straightforward assumption that the understandings implicit in teachers' intuitiveness and experience can be transformed into educational knowledge through critical reflection on practice and focused dialogue (pp.109-110).

In practice, partnership supervision falls into three stages of activity that together form a cycle.

(a) Pre-observation discussion, where one partner proposes a focus for observation and where the proposal is discussed and clarified.
(b) The period of observation of teaching.
(c) Post observation discussion, where the observer's field notes are discussed in relation to the agreed focus (p.112).

The methodology used in this study was determined by a centralist model of curriculum change, but attempted to incorporate teacher ownership and reflection in the application of the strategy. It proved a difficult climate to work in and attempt to change and the outcomes fell far short of the concept of teacher research, or action research, as envisaged by Rudduck. The adaptation of Rudduck's methodology to fit the present study is discussed later in this chapter.

Stage 1: The pilot study

The pilot study was intended to do three things. First, it permitted a preliminary observation of curriculum dissemination practice in TAFE in Western Australia, aimed at discovering where dissemination coincided with, or departed from, the issues identified in the schools-based literature. Second, it was a means of checking the hypothesis that severe dissemination problems were interfering with the process of curriculum change and causing unnecessary frustration and emotional energy amongst TAFE lecturers. Because this part of the original hypothesis had been based on classroom discussions with TAFE lecturers in undergraduate and graduate lecturer-training courses, and on examples from their assignments, it needed to be verified in the field. The pilot study provided a way of doing this, by looking briefly at what people working in TAFE understood by the curriculum dissemination process and what they thought were its strengths and weaknesses. It involved checking the validity of the hypothesis and ascertaining the need for further research in the area. Third, the pilot study provided data on issues and related factors on which to formulate the survey questions which were to be administered in stage 2 of the study.

There has been no formal study of curriculum dissemination in TAFE in Australia and little to guide or focus the direction of this research. It was necessary to put the issues identified in the schools-based research literature together with the issues identified by the TAFE lecturer-trainees, and explore them in the context of TAFE curriculum change in Western Australia. It was necessary to gather broad data on the context of dissemination in TAFE, and on the level of importance which lecturers, course coordinators and curriculum officers attached to it.

In consultation with the then Director of the TAFE Curriculum unit (now Curriculum Services) in the Technical Education Division in Western Australia (now the Western Australian Department of Training), four courses, in which recent curriculum innovation had occurred, were selected. The four projects included those considered by curriculum staff to represent both successful and unsuccessful projects and were

described variously as large, medium and small innovations. The description of size of the innovations was relative, referring to their relationship to each other, rather than to any definitive measurement. The final choice of projects was made by the Director of Curriculum, as he felt he also had a vested interest in the factors which made for the innovations' success or failure. Table 3.1 sets out the projects selected for the pilot study, in terms of their size and the level of success as perceived by the Director and staff of the Curriculum unit.

Table 3.1 Projects identified for the pilot study

Name of course	Size of innovation	Perceived level of success
Electronic Engineering Associate Diploma	Large	Poor
Clothing Studies Certificate	Medium	Poor to medium
Traineeships (Pastoral, Office & Secretarial and Local Government Operations)	Medium	Medium to good
Screen printing and Stencil Preparation Trade Certificate	Small	Good

A number of people involved in the dissemination and implementation of these four projects were interviewed in order to construct the case studies. Separate interview schedules were devised for curriculum officers and project coordinators on the one hand, and lecturers who had implemented curriculum innovations on the other. Although they were asked similar questions, the two groups were expected to have different perspectives on the level of success of any dissemination strategies used. Lecturers were asked how they found out about the innovation, what their feelings had been when they began implementation and what suggestions they would make for improving the dissemination process on future occasions. Curriculum officers and project coordinators were asked what dissemination strategies had been used, whether they thought that they had been successful and how they might change the strategies if

they were in a position to do so on another occasion. The semi-structured interview schedules are included as Appendices A1 and A2.

The interview questions needed to be broad and open-ended because of the exploratory nature of the study (Borg & Gall, 1983; Stake, 1988). There needed to be scope for respondents to identify broad concepts and interpret them according to their own experiences, and to open up new directions and new situations in which the concepts could be explored. There was a risk that respondents might have misunderstood the concepts and the terminology, or have interpreted them too broadly to produce useful data. On one or two occasions, in fact, this did happen. However, the risk was worth taking because of the possible gains.

Using the prepared schedules, a research assistant conducted and recorded semi-structured interviews, which suggested rather than steered, points of focus. A research assistant who did not know a lot about the issue was deemed more suitable to conduct the interviews, rather than one who inadvertently might predetermine the interpretation or direction of the answers. In this way, the respondents were free to roam amongst their experiences and feelings, relating to the concepts as they saw most fitting to their situation.

A sample of 18 TAFE lecturers, Study Area Leaders and curriculum officers who had been involved in the four innovations were selected for interview. The printed interview schedules were shown to interviewees, but filled in by the researcher as the questions were administered. Fourteen of the interviews were recorded on audio tape, two responded face to face but asked not to be tape recorded, and two interviews were conducted by telephone and not tape recorded. Some degree of dissemination difficulty was identified in all four projects, such as lack of communication, lack of time allocated for resource development, the need for staff development and skills training, or a desire for better mechanisms for feedback while the innovation was being developed and implemented. The findings are discussed in detail in Chapter 4.

From the analysis of the four projects (see Chapter 4), it was possible to identify the major factors considered important to the level of success of curriculum dissemination in the TAFE context. These factors were grouped and summarised into positive and negative factors.

From these factors, and more specifically from the answers to the interview question asking about how the interviewees would suggest that dissemination practice could be improved in the future, a survey instrument was developed to examine the importance of dissemination from a much wider perspective throughout the TAFE sector.

The next section describes first, how the pilot study findings were used to draw up the *preferred* and *actual* questionnaire, second, how the questionnaire was trialed, third, the adaptations and modifications made to the questionnaire to be used in the main survey, fourth, how the survey sample was chosen and, finally, an analysis and discussion of response errors.

Stage 2: The questionnaire survey

Devising the trial questionnaire from the pilot study

The interview responses from the case studies were subjected to content analysis (see Borg & Gall, 1983, pp.511-521) in order to identify factors considered to affect curriculum dissemination. All factors mentioned in the interviews were listed and sorted into groups of related topics and sub-topics. They then were restated as positive comments. Thus, the content analysis produced a list of factors, derived from the interviews, which could be viewed as those needed in some degree for effective dissemination. The grouped factors are set out in full in Chapter 4.

This list of factors was grouped further under the following six broad category headings:

- Information about the project
- Involvement in the project
- Complexity of project
- Staff development
- Resource development
- Formative evaluation on implementation

Under the six headings given above, and based on the analysis and listing of factors, the trial questionnaire on *actual* and *preferred* situations (see below) was drawn up to measure lecturer perceptions of the characteristics of curriculum dissemination. The words used in the interviews were not necessarily in language which would be understood in more general contexts. The answers given in the pilot study could not be incorporated into questionnaire items in the same format in which they were extracted from the interviews. They had to be interpreted from their specific contexts to broader ones and in some cases broken into smaller statements. Considerable rewording and refining of the factors under these headings was necessary to produce the questions in the first draft of the survey instrument. The meaning of the statements made by the interviewees was encapsulated in the draft questions and a clear relationship can be seen between the statements set out in Chapter 4 and the items in the draft questionnaire used in the trial. (see Appendix B1).

The two-part *preferred* situation and *actual* situation questionnaire is a technique suited to research in areas in which the respondents might not have had much previous knowledge of or opinion about the context of the research area. Curriculum dissemination is a fairly recent and not universally understood concept, which has not been studied in TAFE lecturer education programs until fairly recently. Many would have to guess at its meaning. It seemed logical to set up an ideal scenario within which respondents would be able to think about the concept and relate to it in their own terms before making judgements about it in practice. The *preferred* situation questionnaire appeared to provide a way of doing this. The *actual* situation questionnaire then would take respondents on to the next step, in which they would make judgements of things which they actually had experienced in comparison with the ideal. The *preferred*

situation would have helped them develop a standard against which they could make judgements. See Appendix B1 for use of *preferred* and *actual* situation questions in the draft questionnaire used in the trial.

Trial of the survey instrument

The draft version of the survey questionnaire (Appendix B1) was trialed with 19 TAFE in-service lecturer-trainees and two non-TAFE trainees. The chief reason for the trial was to establish whether the questionnaire was flexible enough to suit the different contexts in TAFE. It was intended also that a trial would show up any ambiguities in the questions. The trainees should have been able to spot inconsistencies and contradictions, as well as any further effects on the process of curriculum change brought about by new regulatory procedures currently being introduced to the curriculum development process in this State.

There were four specific questions related to the design of the instrument to be answered from the trial:

1. *Is there a difference between the respondents who answered the preferred questions first, and those answering the actual questions first?*
   There are varying opinions in the literature about the desired order of administering the *preferred* and *actual* situation questionnaire (Fraser, 1986; Fraser & Walberg, 1991). It seemed reasonable that the *preferred* situation questions should be answered first, because it would help the respondents formulate the concepts before applying them to their own situation. However, this needed to be tested in the trial.

2. *Can the questions dealing with complexity (questions 3.1 to 3.4) be dealt with in the preferred and actual situation format, or do they need a different kind of approach?*

The third group of questions about the complexity of innovation had been derived from the pilot study in the same way as the other questions. The draft questions asked how important was it that

- curriculum change be introduced slowly
- change occur in small steps
- one feature of change be introduced at a time (eg, new content, new educational ideas, new structures, etc.)
- change be introduced all at once as one large innovation and dealt with altogether.

There seemed to be a problem with this group of questions in that the final question suggests a different perspective and it might not be possible for respondents to answer it on the same basis as the first three questions. The research literature, in fact, does include examples in which, in different situations, both large complex changes and small incremental changes have been disseminated and implemented successfully (see Chapter 2). It was hoped that the trial might help the researcher to reword the questions more appropriately.

3. *Is there a difference between preferred and actual situations?*

   This was the most important question, because the feasibility of the later survey depended on the answers. If there proved to be no difference between the *preferred* and *actual* situations, and the findings did not back up the findings of the pilot study, then either the findings of the pilot study or those of the trial questionnaire would be invalid and therefore the research itself would be on the wrong track.

Modification of survey instrument from the trial results

The questionnaire was trialed with three groups of TAFE lecturers. Group 1 (N=8) and group 3 (N=5) answered the *preferred* situation first and the *actual* situation second, while group 2 (N=6) answered in reverse order (see Table 3.2). These groupings were set up to test whether differences could be observed between those who answered the *preferred* situation first and those who answered it last (trial question 1 above). Groups

1 and 2 belonged to the same class group and had shared similar classroom experiences.

A small non-TAFE group (N=2), who answered the *preferred* situation section first, also was included in the trial, and their responses are included as group 4 in Appendices B2 to B8 for comparative purposes only. Their answers are not included in Figures 3.2 and 3.3. They are included, however, wherever reference is made to total means. Groups 3 and 4 belonged to the same class group and had shared similar classroom experiences. The groups participating in the trial questionnaire survey are shown in Table 3.2. The total trial data is shown as Appendix B3.

Table 3.2 Groups participating in trial

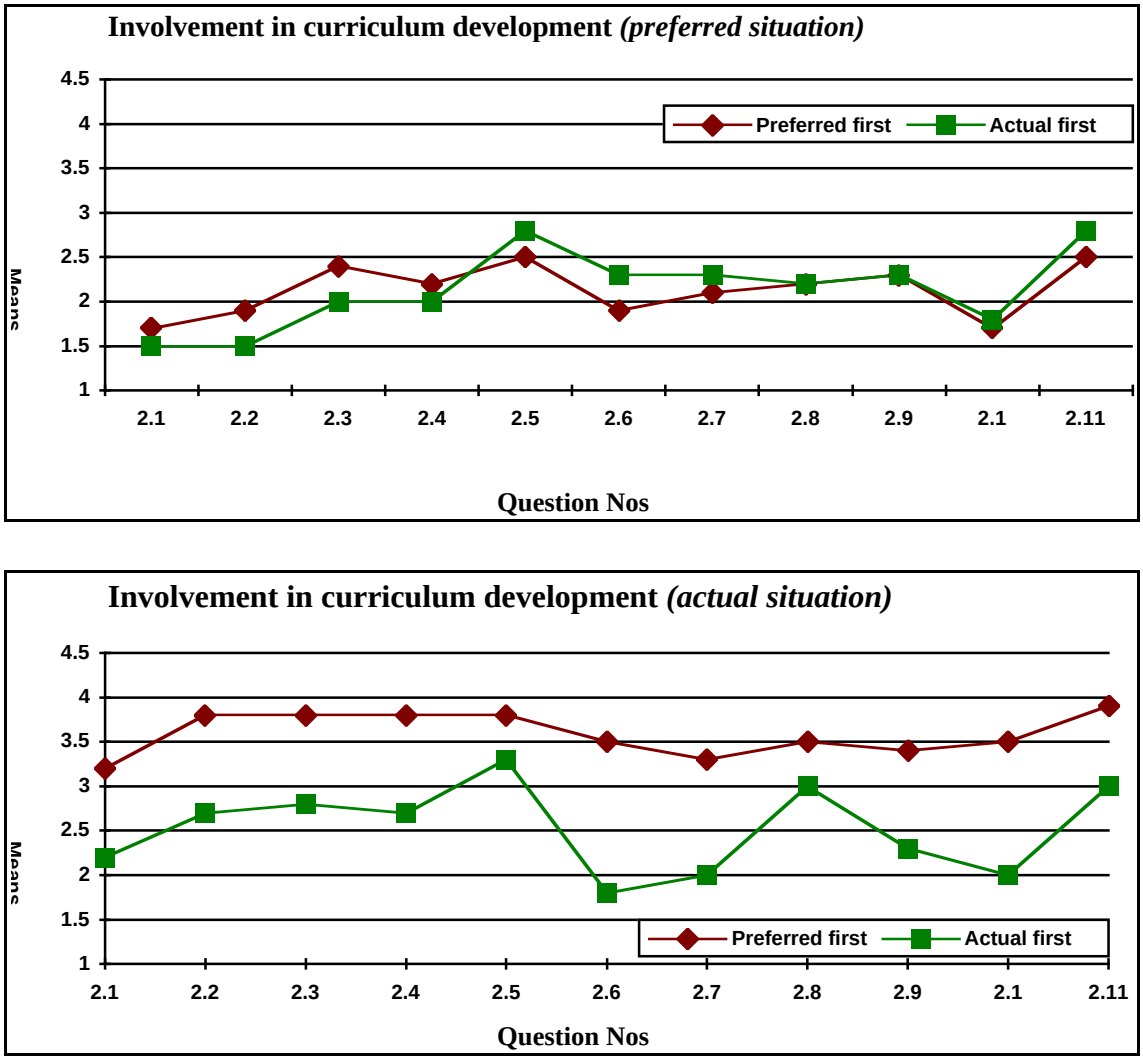
Group	Number	Description of group	Variations
1	8	BA (TAFE)	*Preferred* situation first
2	6	BA (TAFE)	*Actual* situation first
3	5	Grad Dip (Higher & Further Ed), TAFE	*Preferred* situation first
4	2	Grad Dip (Higher & Further Ed), non-TAFE	*Preferred* situation first

A graphical analysis was completed to compare the means of those TAFE trainees who answered the *preferred* situation questionnaire first and *actual* situation last (groups 1 and 3) and those who answered the *actual* situation questionnaire first (group 2). This analysis was based on the mean raw scores for each response. The graphical analysis is given in Appendix B4. An example of the graphical analysis of the questions on *involvement in curriculum development* (questions 2.1 to 2.11) is shown in Figure 3.2 as an illustration of the comparison.

The ranking of importance in the trial questionnaire was given as a scale of 1 to 5, with 1 representing the most important and 5 the least important. This means that, in the graphical representations, a higher score indicates lesser importance. This order was reversed in the questionnaire survey described in Chapter 5, because of the ambiguity of having to read the graphs ‘up-side-down’.

Figure 3.2 Comparison of responses from lecturers responding to preferred situation first with those of lecturers responding to actual situation first

(1 = most important; 5 = least important)



The analysis indicated that, while people in the two groups displayed similar preferences, there were much larger differences in their interpretations of what actually occurred. In the *actual* situation responses, group 2 (who answered the *actual* questions first) displayed greater variations in their answers to almost all questions compared with combined groups 1 and 3 (who answered the *preferred* questions first). This observation is confirmed by reference to comments made by some respondents at the time of the trial. One respondent from group 2 appeared to be confused between the *preferred* and *actual* situations and had difficulty getting started with the second part of the questionnaire on the *preferred* situation. Having completed the *actual* situation questions, he asked if he could swap the first part of the questionnaire from *actual* to

preferred, and answer the second part as though it were the *actual*. This explains why there were eight respondents in group 1 and six in group 2, instead of seven in each, as originally planned.

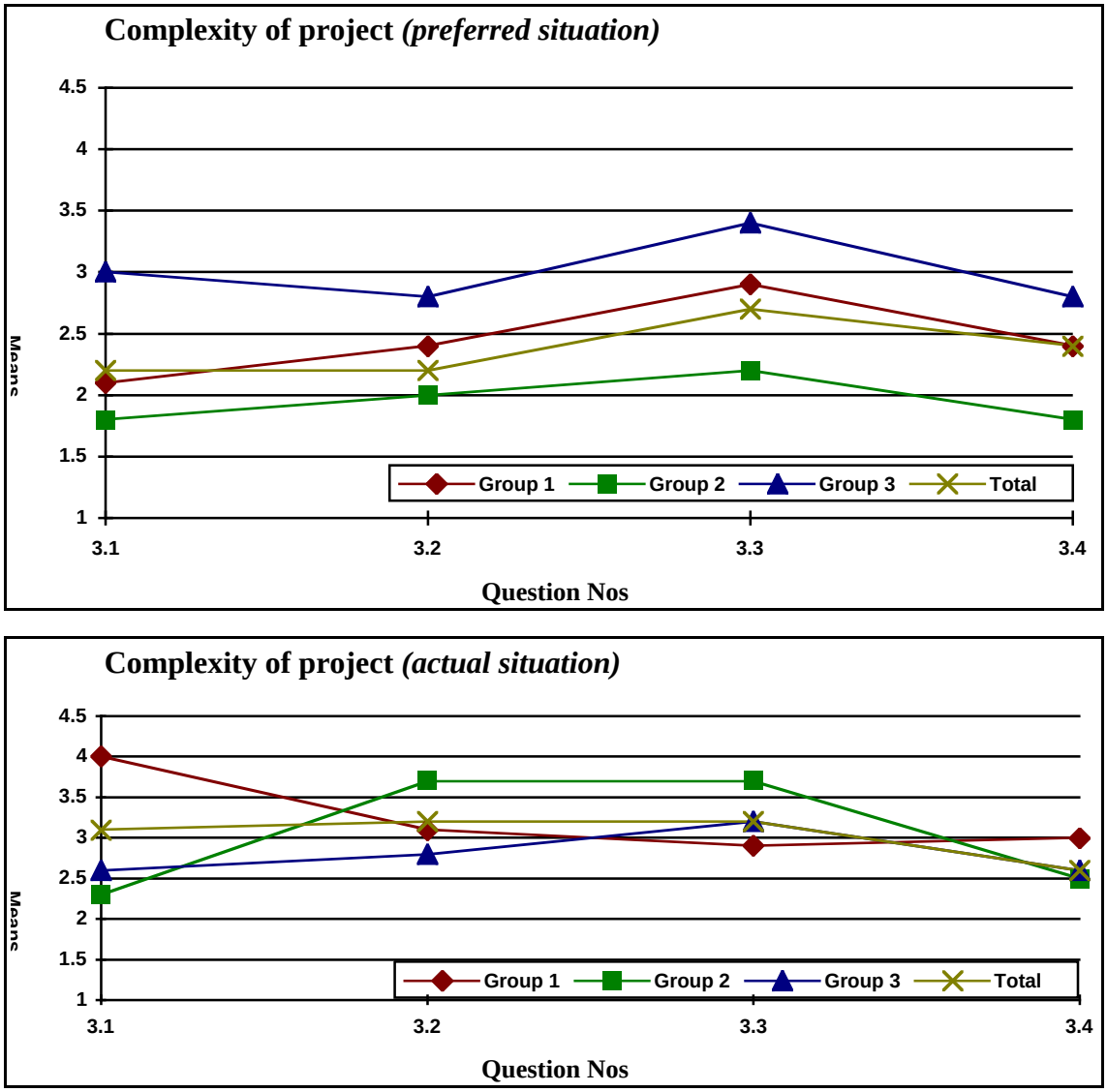
A further comparison was made with the total means (see Appendix B5), as a guide to whether either group was more atypical than the other. From the graphs of the *actual* situation means in particular, it appeared that group 2 was consistently further from the total mean than groups 1 and 3. This suggested that the combined groups 1 and 3, or those who answered the *preferred* situation questionnaire first, produced less varied responses and appeared to be more consistent in their answers in comparison with respondents in group 2, who answered the *actual* situation first.

The evidence therefore pointed to the fact that, for this questionnaire at least, it would be preferable to administer the survey in the order in which it was answered by groups 1 and 3, that is, the *preferred* situation questions to be answered before the *actual* situation questions.

The responses did not appear to answer the second question defined at the beginning of this section, *Can the questions dealing with complexity (questions 31 to 3.4) be dealt with in the preferred and actual situation format, or do they need a different kind of approach?* There were four questions on complexity which might have been contradictory (see above).

The graphical depiction of the trial answers to these questions is shown in Figure 3.3. 'Total' in Figure 3.3 represents the means of the responses from the total group of respondents (N=21). The *preferred* situation responses indicate very little difference between the means of the four questions. The means of the *actual* situation responses on the other hand are inconsistent and the means of the four responding groups cross several times in the graphical representation.

Figure 3.3 Comparison of responses from Groups 1, 2, 3 and totals
(1 = most important; 5 = least important)



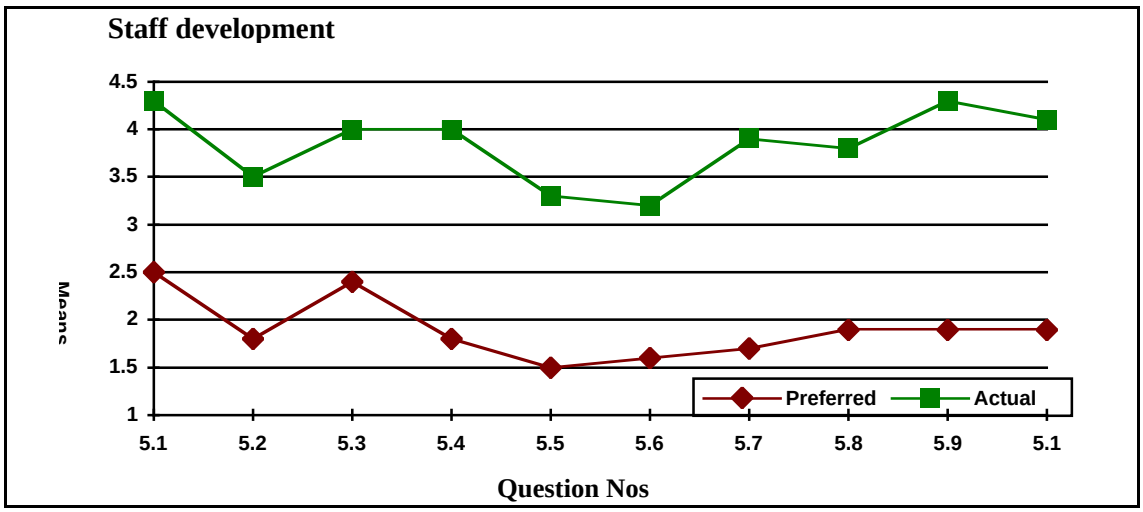
It was believed that the four questions 3.1 to 3.4 offered only two alternative choices, and were not appropriate for inclusion in the questionnaire survey. The issue of project complexity, however, had been defined as important in the pilot study and another method needed to be found to elicit respondents' views about the importance of the degree of complexity in curriculum innovation. Further discussion was held with a researcher who had done work in the area of educational change (G. Dellar, personal communication, 1993) and, as a result, the questions on complexity eventually were dropped from the main part of the questionnaire and redrafted as a question to go in a

third section after the *preferred* and *actual* situation questions. For further detail of the development of the third section of the questionnaire, see below.

Finally, a comparison was made between the *preferred* and *actual* situation responses from the groups answering the *preferred* situation questions first (groups 1 and 3) for all the factors included in the questionnaire. The analysis indicated that the differences were wide enough to justify continuing the study on a wider scale. In fact, if the results of the trial groups are representative of the broader population, there is indeed a serious difference between the *preferred* and *actual* situations in all but one of the factors included in the questionnaire. The complete analysis is given in Appendix B6.

An illustration of the graphical analysis showing the difference between *preferred* and *actual* situations for one group of questions (questions 5.1 to 5.11 on staff development) is shown as an example in Figure 3.4.

Figure 3.4 Differences between preferred and actual situation responses for groups 1 and 3 (preferred first) for questions 5.1 to 5.11 on staff development
(1 = most important; 5 = least important)



The trial questionnaire did not give any further indication that any of the questions or instructions were not clear, not salient, or in other way confusing, and therefore no questions were eliminated on this basis.

The *preferred* and *actual* questionnaire needed to be separated in some way (Dellar & Giddings, 1990, p.4), so that the latter could be approached with a different mind-set from the first. It was decided that this could be done by including an invitation to write general comments in a section between the two parts. These comments also would serve to add a personal, or emotional, perspective to the data, which also could be used in the analysis.

A third section was added to the *preferred* and *actual* situation questionnaire, as mentioned above. The third section included questions about various characteristics of the innovation, including its size and complexity. It also included the broad open-ended question of *How do you feel about the innovation?* This was included to encourage respondents to qualify, justify or expand any of their answers, and to give them an opportunity to express their subjective views about their experience of a recent innovation in which they had been involved. However, the space given was limited to five lines to encourage them to be specific in the comments that they wanted to make.

Finally a check was made with the Manager of DEVET's Curriculum Services unit (which the Curriculum Branch had become), and TAFE titles and offices which had changed in the intervening two years, such as project director and the TAFE External Studies College, were updated.

The reason for the questionnaire survey, stage 2 of the research, was to collect data more widely about curriculum dissemination, and in more detail, using a larger number of lecturers and projects than had been possible in the interviews for the pilot case studies. From the survey data it was possible to focus on the second research question, *Which factors are important in ensuring effective curriculum dissemination in TAFE?*

The draft version of the questionnaire used for the trial is included as Appendix B1, while the modified version used for the questionnaire survey is at Appendix C1. Group

means and totals of the trial data are shown at Appendix B2, while the full graphical analysis of the trial data is included as Appendices B3 to B8.

Choosing the survey sample

The sample used in the questionnaire survey consisted of 100 persons and was project based. At a meeting of all DEVET (now the Department of Training) curriculum officers and the Manager of Curriculum Services, the projected population and sample were discussed and the parameters of the research were explained:

- The population was to consist of users of an optimum number of projects of different sizes and kinds.
- The population was to include users of innovatory ideas and delivery systems, as well as new or revised curriculum projects.
- The population was to include users of current innovation (ie, where new curriculum materials had been introduced within the last two years, and the experience current or still fresh in the minds of the users).
- The population was to include users of curriculum innovations produced as WA TAFE or nationally accredited projects.
- The population could include users in Community or Regional Colleges if they were involved in TAFE produced curriculum projects.
- The population was not to include technical or vocational courses produced or implemented by other private providers.
- The sample was to consist of a proportional representation of users from the population.

Participants at the meeting brainstormed these ideas, and suggested a total of 14 projects which appeared to fit all the conditions (see Figure 3.5). They provided the name and telephone number of the Study Area Leader or a contact person for each project. This was meant only as preliminary information, as the curriculum officers were not involved in the projects once they had been accredited, and were not aware of what was going on in the colleges. From that point, the researcher was to work with the contact person to ascertain the suitability of the project (eg, whether it actually was being implemented), collect general data on the project and select an appropriate sample of users to include in the survey.

Figure 3.5 Curriculum innovations suggested by DEVET curriculum officers for inclusion in the questionnaire survey

Associate Diploma of Business (Management)
Accelerated Associate Diploma of Applied Science (Fashion)
Introduction to Child Care Certificate
Certificate of Hairdressing computerised learning
National Metals project (Foundry & Pattern making; Fitting and Machining; Electrical Engineering, Metal Fabrication & Sheetmetal, and Fluid Power)
Certificate in Mariculture
Advanced Certificate of Veterinary Nursing and Animal Care course.
Associate Diploma of Applied Sciences (Applied Language Studies)
Certificate of Gardening Skills
Joondalup Campus Stage 1: Flexible learning; Stage 2: Flexible deliveries
Advanced Manufacturing Technologies Centre
Advanced Certificate of Surveying; Associate Diploma Applied Science (Surveying); Diploma of Applied Science (Surveying)
Associate Diploma in Applied Science (Work Safety and Health); and Advanced Certificate of Work Safety and Health.
Certificate of New Opportunities for Women

A list of preliminary information needed about the projects was drawn up. This was to double check whether they fitted into the parameters described, and to elicit a list of names and telephone numbers of all lecturers involved in the innovation (Figure 3.6).

Figure 3.6 Preliminary data needed about the selected innovations

Correct full name of curriculum innovation
Curriculum officer and telephone number
Designated College and telephone number
Study Area
Study Area Leader
Contact person and telephone number
Staff Development Officer
Brief description of innovation
Size of innovation (large, medium, small, and from what perspective)
Date commenced
All colleges involved in innovation, including Regional and Community Colleges
Number of lecturers involved in the innovation
Names and telephone numbers of all lecturers involved in innovation.

Collecting preliminary data about each project (Figure 3.6 above) proved difficult and time consuming. The information does not exist in a central data base, such as DEVET's Information Technology unit, or the College Management Information System (CMIS) and had to be extracted slowly and painfully from individual Study Area Leaders and senior lecturers. While the Study Area Leader in each case should have been able to provide all of the required information, some claimed to be too busy, some gave incorrect information which had to be rechecked, and others displayed suspicion and fear about who might have access to the information. Two senior lecturers asked that the survey questionnaire be directed to staff through them, three asked to be allowed to check the survey data when it had been collected in case it contained politically sensitive information, and one asked for a further covering letter to be attached to each questionnaire to reassure lecturers in the sample about the importance of the research and their part in it. In one college, it proved impossible to acquire a list of lecturers in each section of the project, and the information had to be collected one by one as the proportional sample was in the process of being selected.

From the preliminary information, a further sorting became necessary. The National Metals project proved to be too large to be considered as one project (and in fact was five) and a selection was made of three Trade Certificate areas (the Electrical apprenticeship course, Foundry apprenticeship course, and Fitting and Machining apprenticeship course), representing three diverse Metals projects of varying sizes. Four projects had to be rejected because they were not ready, or had experienced delays in implementation (Introduction to Child Care Certificate, Certificate in Mariculture, Certificate of New Opportunities for Women and the Advanced Certificate of Veterinary Nursing and Animal Care).

A revised list of projects, with the number of staff involved in each innovation, was drawn up, and a calculation was made of the proportional number from each required to make up a total sample of 100 (Table 3.3). Where the majority of lecturers were part-time, the sample numbers were calculated according to equivalent full-time staff numbers (eg, the Advanced Manufacturing Technologies Centre project and the

Associate Diploma in Applied Science (Work Safety and Health) and Advanced Certificate of Work Safety and Health). Refer to Appendix C2 for a detailed view of the proportional sample selected from subgroups within projects.

The total population group of 165 eventually listed was believed to be the complete number of all TAFE lecturers involved in the implementation of new curriculum projects and ideas in the State at the time, as defined within the restrictions listed in Figure 3.5. The sample of 100 was selected from these, representing 60.6% of the total population. Refer to Table 3.3 and Appendix C2 for details of sample selection from each project.

Table 3.3 Proportional sample selection from eligible projects

Name of curriculum Project	Total pop	% of total	Prop'l sample
1. Joondalup Campus Stage 1: Flexible learning. Stage 2: Flexible deliveries	26	15.8	16
2. Associate Diploma of Business (Management)	24	14.5	15
3. Certificate of Hairdressing computerised learning	22	13.3	13
4. Advanced Certificate of Surveying; Associate Diploma Applied Science (Surveying). Diploma of Applied Science (Surveying)	20	2.1	12
5. Advanced Manufacturing Technologies Centre project	20	12.1	12
6. Engineering Tradesperson (Electrical)	15	9.1	9
7. National Metals project: Fitting and Machining	10	6.1	6
8. Associate Diploma in Applied Science (Work Safety and Health); and Advanced Certificate of Work Safety and Health.	10	6.1	6
9. Accelerated Associate Diploma of Applied Science (Fashion)	8	4.8	5
10. Associate Diploma of Applied Sciences (Applied Language Studies)	4	2.4	2
11. National Metals project: Foundry (including Pattern making)	3	1.8	2
12. Certificate of Gardening Skills	3	.8	2
Total	165	99.9	100

The questionnaire was distributed with a covering letter briefly explaining what they were being asked to do (see Appendix C1). Thirty two were returned initially. A number of weeks after the survey was posted, a follow-up letter was mailed reminding

the sample group to return the completed questionnaire (Appendix C3). This resulted in a further return of 21 questionnaires making a total of 53%. Finally a letter of thanks was dispatched to all in the sample, whether they had responded or not (Appendix C4).

Borg and Gall (1983) might have queried the saliency of the questionnaire to the sample, but as the lecturers were purposively selected as a cross sectional sample, and as their answers were fairly consistent, the 53 questionnaires returned was considered sufficient for analysis. All but one (52%) contained some useable data. These 52 respondents attempted the *preferred* situation questions, and most responded to at least parts of the personal and innovation questions in the third section. However, only 40 responded appropriately to the *actual* situation questions, and possible reasons for this are discussed in the following section. This number, however, was considered sufficient for analysis, and no further follow-up occurred.

Response errors

The useful response rate to the *actual* situation part of the questionnaire (40 responses out of 53 returns) was disappointing. Three people did not respond to the *actual* situation questions at all, believing that it did not concern them, and 10 gave contradictory comments, indicating that they did not understand what was required and invalidating their data. The relatively low response rate of 40% to an important part of the instrument suggests that there was a problem with the questionnaire which had not shown up in the trial. There could have been other responses in which similar misapprehension had occurred, but no comments were given to indicate conflict in their answers. They were included in the analysis, and they could have caused some distortion.

Only two people contacted the researcher directly about this problem, one before submitting the questionnaire and one after it had been completed and returned. The significance of their queries did not become clear until the analysis began, when it

became obvious that as many as 10 of the respondents had attempted to respond to the second set of statements, not as the *actual* situation as intended, but as the ideal reconceptualised once they had lived through the *actual* situation. This resulted in these respondents ticking responses similar to or higher than the *preferred* situation questions, because the statements still were seen as important, even though their comments indicated that their *actual* experience had been far from the ideal. Another respondent submitted two versions of the *actual* situation questionnaire, the second bearing the comment, "Do you mean how important? If so, my responses are very similar to the *preferred* situation. However, if you mean what actually happened, then you get responses as follows" The second version was used in the analysis.

It is not clear why so many misinterpreted the *actual* situation part of the questionnaire. The introduction at the top of the page contained the words, "Answer this questionnaire to describe on the scale of 1 to 5, how important each of these factors was *in this particular project.*" The letter accompanying the questionnaire included the instruction "try the same set of statements again under the heading *actual* situation, in relation to what actually did happen in your specific curriculum innovation" (see Appendix C1). The questionnaire had been read by a number of other people as well as the lecturer-trainees who participated in the trials, and the instructions had in every case been clear to them. If the possibility of misinterpretation could have been anticipated, it is possible that by changing a few words, the loss of 10 responses could have been avoided. Possibly the use of the word 'significant' would have been better than 'important'. An analysis of the survey data, and the findings, can be found in Chapter 5.

The analysis of data collected in the survey produced a set of factors on which to base a strategy of curriculum dissemination to be applied and analysed in a real curriculum project. The strategy also needed data on the constraints which had to be considered and a selection of tactics to be applied as an ideal dissemination strategy to a new curriculum project. The next section discusses the setting up of the collaborative

dissemination strategy as a series of factors used to define the strategy, the philosophy of the strategy and the selection of dissemination tactics to be used.

Stage 3: The collaborative dissemination strategy

Factors used to define the strategy

The lecturers who responded to the survey identified a need for information, involvement and support in curriculum innovation (see Appendices D2 to D4) and the data specified the importance of the dissemination characteristics within each of these needs (represented later in Chapter 5).

The difference between the *preferred* and *actual* situation means for the 40 valid responses to the 53 statements was calculated. Those statements showing the greatest difference indicated the areas which needed greatest improvement. These comprised the first set of factors for defining the strategy.

A second analysis was made of the 40 valid *preferred* situation responses in order to find which dissemination factors the lecturers considered more important than others in the process of change. The results were ranked according to the mean raw scores. The list of ranked factors was restated in terms of lecturer needs (see Appendix D7).

An arbitrary system of categorisation of importance was devised, first by dividing the 53 questions into five roughly equal groups and then looking for natural breaks in the ranked means. A descriptive label was allocated to each group to summarise its comparative importance in the change process. This was a subjective activity, based on the survey answers and a knowledge of the TAFE context. The labels were subsequently approved by the staff of Curriculum Services, and finalised as shown in Table 3.4. Using this categorisation and applying it to the statements, the factors then were classified and ranked as shown as Table 5.7 in Chapter 5. These became the second set of factors used for defining the dissemination strategy.

Table 3.4 Categories for ranking dissemination factors

Category	Range of response means *(5 = most important and 1 = least important)*	Description
not necessary	3.35 to 3.98	Could be neglected without affecting lecturers or successful implementation
of limited use	4.00 to 4.15	Would help lecturers become involved in the change process; useful for development of curriculum skills for some lecturers.
useful	4.20 to 4.28	Would help lecturers become more involved in the change process; useful for successful implementation
important	4.30 to 4.45	Neglect causes confusion, cynicism and low morale; important for successful implementation
essential	above 4.50	Neglect causes severe implementation problems; essential for successful implementation.

The two sets of analysed dissemination factors described above were distributed to curriculum officers at the Department of Training Curriculum Services to study and comment on. A meeting of all curriculum officers with the researcher was held to discuss the areas needing greatest improvement and the ranked needs statements and to deliberate on a dissemination strategy which they thought might work in practice. They were asked to consider the feasibility of the factors in constructing the strategy, firstly, in the light of their defined importance in the dissemination process and, secondly, within the constraints typical of the context within which curriculum is normally disseminated. They decided that, realistically, the strategy should concentrate specifically on the first two levels of ranked needs statements (23 in all) as far as was possible, and that the rest should be left to look after themselves. Thus, the strategy was to include all *essential* and *important* statements, and as many of the others as possible.

The Curriculum Services staff were asked to suggest constraints which were likely to be encountered in the dissemination process. The constraints identified at this meeting were not dissimilar to those identified in much of the literature and those mentioned by a number of the survey respondents (see Figure 3.7).

Figure 3.7 Constraints on successful dissemination

1. Lack of funding
2. Lack of time
3. Speed of change expected by industry
4. Conflicts of interest within industry
5. Lack of human resources to facilitate change
6. Difficult organisational structure, with vertical communication channels frequently blocked
7. Lack of constant direction by leadership
8. Changeability of focus of commitment by senior staff
9. Reduction of staff development time and funding
10. No 'safety net' mechanism to solve problems at lower levels
11. Low morale among lecturers
12. Lecturer resistance to change
13. Feelings of alienation of lecturers

There were elements within this list which could not be changed, such as the organisational structure of the Department of Training and conflicts within industry, which have to be accepted as givens. However, elements such as the safety net mechanism, and lack of staff development time, were problems which could be solved and were built into the projected strategy. The Manager of Curriculum Services indicated that he would look for funds to cover staff release time and travel. The solution to some of the other factors had to wait until a specific project had been selected and could be built into the collaborative process. These constraints comprised the third set of factors for defining the strategy.

A fourth set of factors concerning lecturer *meaning* and *ownership* were considered as part of the strategy. The research thus far had produced data on management, or technical problems, and on the factors defined by lecturers and curriculum officers as part of a centralist model of dissemination control. Yet much of the literature has emphasised change "as a cultural problem that requires attention to context and to the creation of shared meaning within working groups" (Rudduck, 1991, p.30). Unlike Rudduck's working groups of teachers, these lecturers would have little input into the actual curriculum changes. Their culturalisation would begin at the moment when they heard about the new curriculum, and would carry them through as secondary

participants as they developed it for implementing in the classroom. Thus the fourth part of the strategy needed to encourage lecturers to reflect on what was happening to them during the dissemination process and the meaning of change to them as lecturers. Techniques needed to be generated to tap into the lecturers' thoughts and feelings as they were finding out about, and learning to relate to, the innovation.

Philosophy of the strategy

The strategy and tactics chosen were to serve four purposes. First, the strategy itself was to be tested to ascertain its suitability as part of a centralised dissemination model, or a method which management could use to improve the process for future practice. Second, the strategy was to extend current practice from just being one of administrative or management concern, to one involving the users in the study of their own practice, overcoming the feelings of alienation and lack of support identified in the survey. Third, the strategy was to fulfil the lecturers' identified need for information, involvement and support in curriculum innovation, as indicated from the pilot study and the questionnaire survey. Finally, teaching materials and resources were to be produced in a way which involved the lecturers, generating a sense of ownership, and avoiding the resentment and frustration testified to by the survey respondents.

From the theory of meaning and ownership described in the literature, from the constraints identified by curriculum staff and from the needs identified by lecturers in the survey, a philosophy of approach was devised. One of the anticipated problems was the antipathy, or even hostility, expected from lecturers without a strong tradition or respect for reflection or teacher research. The tasks which they were asked to perform had to be kept brief and easily understood. The techniques used had to trigger the desired awareness level which would lead the lecturers to feel that they were participating in their own project on their own terms. The tasks had to be unthreatening. They had to include not only elements of staff development and skills upgrading, but also encourage lecturers to cope with the personal ambiguities of

change, so that they would give their considered input into improving the innovation from the practitioners' point of view. Also, it was desirable that the tactics include more opportunities for talking than writing. They needed to include a rhetoric which lecturers would learn to apply to their reflection and reshape their thinking. As Popkewitz *et al.* (1982) observed, "all reform programmes feature rituals, ceremonies and particular language styles which create a feeling ... that things are getting better" (p.169). Finally, written records of staff development activities needed to be made and distributed to all staff involved in the innovation. This would allow those who could not be present at meetings the opportunity to keep themselves fully informed, as well as supplying a record and reference for those who were present.

Dissemination tactics

Six tactics were planned to meet the aims of the dissemination strategy:

1. *Distribution of curriculum materials*

   It was considered important to distribute the syllabus document and other related materials directly to individuals who would be involved in teaching the new course, rather than expecting that these materials would reach them automatically through the system.

2. *Meetings*

   These were conceived as a series of broad-based staff development meetings, which all lecturers involved in the new course would attend to familiarise themselves with the requirements of the course, define their own roles within it and jointly develop teaching materials. It was hoped that there would be at least four such meetings during the semester. Travel and staff release time were to be funded.

3. *Newsletters*

   This was seen as a way of keeping a record of discussions and consolidating decisions made at the meetings and of spreading information and ownership to

anyone who could not attend. The Newsletters were envisaged also as a method of informing those who were not involved in the new course about what was going on in the project.

4. *The network*

   The concept of shared responsibility and ownership were to be encouraged and developed by setting up a network of those involved in preparing for the new course. This was seen partly as telephone contact and partly as an ideal of team membership. The network was envisaged as an extension to the face-to-face contact established at the meetings and a method of keeping lecturers in distant colleges in touch with the rest of the innovators. It was meant to achieve ongoing information giving and support.

5. *Questionnaires*

   Questionnaires were to be distributed to all potential users of the new course. Three questionnaires were planned. The first was to explore lecturers' views about curriculum change, to raise their awareness of potential problems in implementing the new course and to assess their readiness to cope with these issues. The second questionnaire was meant to explore the depth and level of involvement of the lecturers in the change process. The third questionnaire was to be distributed after implementation began and was to consist of the *preferred* and *actual* situation questionnaire used in the questionnaire survey, with the aim of comparing the responses of the lecturers involved in the dissemination strategy with those of the survey group. The questionnaires were seen also as a further method of two-way communication between the researcher and the lecturers.

6. *Materials development*

   The most important deficiency in the curriculum change process which was identified by the questionnaire survey was that lecturers had to develop teaching materials in isolation as they began teaching new courses. This tactic was to ensure joint development of well planned teaching materials, with every lecturer taking a

share of the responsibility. Fair quality materials were to be produced before they began the new course and a mechanism put in place for monitoring and reviewing them for further development in future.

It was planned that these activities would be put into place as a series of tactics, to include a repetitive pattern of information giving, support, lecturer involvement and data collection, as shown in Table 3.5. The time frame was envisaged as spanning a three-month term (the second half of first semester) with full implementation occurring in the second semester.

A curriculum project was chosen to fit into the time frame of the research (see Chapter 6) and the proposed strategy was discussed with the designated curriculum coordinator and the Study Area Leader. The selection of the curriculum project and the application and evaluation of the strategy are described and discussed in Chapter 6.

Methodology of the dissemination strategy

The dissemination strategy had three aims:

- To provide lecturers with information, involvement and support with all of the *essential* and *important* factors, and as many others as possible, from the list identified from the survey.
- To remove as many of the identified constraints as possible, and to work as comfortably as possible within those which could not be removed.
- To set up strategies to encourage lecturer participation and ownership, to involve them in the study of their own practice, and to break down feelings of alienation and resistance.

The researcher was to work with the Study Area Leader and the curriculum officer, providing knowledge of the theory of curriculum change and support for the dissemination plan. At curriculum development meetings, the researcher was to act as coach and adviser, interpreting the curriculum mandate and the expectations of the

Department of Training, the Australian National Training Agenda and the IETC, on one hand, and assisting lecturers to understand and accept the changes, on the other. The researcher was to be the 'coach', 'change agent' or mediator between management and the lecturers.

Table 3.5 Planned pattern of dissemination tactics

Purpose	Tactics
Information	Distribution of syllabus document, first Newsletter, and Agenda for first Staff development meeting.
Support	First staff meeting - information giving; lecturers' concerns about the innovation; encouragement of commitment and ownership of teaching styles and materials development; joint workshop on development of teaching notes. Introduction of network concept.
Involvement	Further development with network contacts in own time. Commencement of materials development.
Data collection	First questionnaire to assess awareness level and staff readiness for change.
Information	Second Newsletter. Other curriculum materials distributed.
Support	Second staff development meeting to discuss further concerns; materials development; and implementation planning.
Involvement	Further materials development with network contacts in own time. Third Newsletter, including records of staff meetings.
Data collection	Second questionnaire to encourage lecturer reflection and involvement
Support	Third project development meeting. Materials development completed.
Information	All teaching materials distributed.
Involvement	Implementation. The network in operation.
Data collection	Application of the original *preferred* and *actual* questionnaire.
Support	Fourth project meeting. Reports on implementation. Review of dissemination process. The network.

The strategy was intended to encourage two-way communication, collaboration in joint materials development and lecturer reflection on their practice. It was intended to foster teacher meaning and a sense of ownership. However, 'teacher research' was not envisaged in any formal way, as the time scale was too short and the lecturers had too

much to learn and cope with without having to engage in formal research or reporting procedures.

Nor was it meant to include participant observation as a formal procedure on the part of the researcher. It was believed that the researcher would observe the change process in action and keep notes leading to a descriptive analysis report, as a case study of curriculum dissemination processes. However, as is explained in Chapter 6, it became impossible for the researcher to remain detached and strong elements of participant observation method and ethos began to intrude into the process and make it difficult for the researcher to remain separated from the team and, later, to withdraw physically from the project on its completion.

What had started out essentially as ‘the application of the strategy’, as an administrative approach to improving lecturer involvement, became a demanding experience incorporating leadership and motivational roles on the part of the researcher and a hungry dependency on the part of the lecturers.

The project did not keep to the planned strategy. The human factor in this untried arena of improving the curriculum change process amongst TAFE lecturers was far stronger and more wilful than could have been foreseen and the project took on a life and direction of its own. The description of the project and an analysis of the factors which influenced it are to be found in Chapter 6.

Conclusion

This chapter described the methods used in the three distinct stages of the present research. A model of the research design is included as Figure 3.1.

The chapter explained how each stage developed from the data gathered from the previous stage and how the research instruments were validated from that data and from the literature. The pilot study produced a list of factors which lecturers believed

would help to improve the dissemination and implementation of new courses. These factors were used as a basis for designing the survey questionnaire. The findings from the survey questionnaire produced two sets of factors which were used in the development of the dissemination strategy. Other factors were drawn from the literature and from the constraints identified as existing in the TAFE system. The three stages were planned to culminate in a dissemination strategy to be applied and evaluated in the field as a model for application to future curriculum innovation projects.

The next chapter concentrates on stage 1 of the research design as depicted in Figure 3.1. This is a pilot study of four dissemination case studies, based on the analysis of 18 semi-structured interviews.

Chapter 4

The pilot study

A case study that portrays an educational problem in all its personal and social complexity is a precious discovery (Stake, 1988, p.254)

This chapter describes the first stage of the three-part research design set out in Figure 3.1 in the previous chapter. It examines the first research question defined in Chapter 1: *What are the issues which concern users and disseminators in regard to curriculum dissemination in TAFE?*

The pilot study consisted of four exploratory case studies of four selected TAFE curriculum innovations. The studies explored the dissemination tactics experienced by those involved in the innovations and attempted to ascertain the issues which were considered important. They involved semi-structured interviews with lecturers, curriculum officers and Study Area Leaders about their views on the dissemination processes experienced in the innovations and their suggestions for improvement.

The purposes of the case studies were: first, to observe the practice of dissemination in the field; second, to test the first part of the hypothesis that there are serious dissemination deficiencies affecting the smooth implementation of new curricula; and third, to provide data on which to construct stage 2 of the research.

The first section of this chapter describes the administration of the interview schedules, the perspectives of the interviewees and the responses given in each of the four case studies in turn. The factors affecting the success or failure of dissemination are discussed in detail in the second section. The third section gives a brief summary of factors affecting the dissemination of these four projects, listing the findings in terms of positive and negative factors in the dissemination process. The fourth section discusses the findings in general, relating them to the existing situation in the TAFE system and discussing some of the issues likely to be important in the research to

follow. Finally a conclusion sums up the significance of the pilot study within the design of the total research.

The four case studies

The pilot study was the first part of this research and occurred several years ago, before the new corporatist reforms were put in place. However, a number of the reform features of the 'new TAFE' era already were anticipating the later reforms. The Australian Council for Tertiary Awards (ACTA) and the Western Australian Council for Tertiary Awards (WACTA) were forerunners of the new training agenda set up by the National Training Board and SSAB (see Chapter 1), attempting to enforce new standards in flexible and rationalised delivery, including modularisation, alternative entry and exit enrolment points and semester based timetables. They encouraged closer links between industry and vocational education and training, and the role of the Industry Advisory Groups had been defined and strengthened to ensure tripartite (industry, government and unions) cooperation in training development. At this stage TAFE still held the major responsibility for course development.

The projects selected for the case studies were recommended to the researcher by the Director of the TAFE Curriculum unit and consisted of:

1. Associate Diploma in Electronic Engineering
2. Clothing Studies Certificate
3. Traineeships (Pastoral, Office & Secretarial and Local Government Operations)
4. Screen printing and Stencil Preparation Trade Certificate

Semi-structured interview schedules were administered to 18 TAFE staff at three levels of responsibility in the four curriculum innovations selected. These were officers from the Curriculum Branch (now Curriculum Services), the project coordinator or senior person within the project and lecturers who had used the new or revised course. The following definition of dissemination was given to the interviewees to help focus their answers on the research issue:

> Curriculum dissemination is the process of *informing* teachers about a new curriculum so that they *understand* and *accept* it before they have to use it. It might include strategies such as involving teachers in development, potential user participation in course writing or subject trials, staff development activities or formal marketing strategies.

Separate interview schedules were devised for curriculum officers and project coordinators, on the one hand, and instructors who had implemented the innovation, on the other. The questions were similar, but the two groups were expected to have different perspectives on the level of success of any dissemination strategies used. The interview schedules are included as Appendix A1 and A2. The printed schedules were shown to interviewees, but filled in by the researcher as the questions were asked and discussed. Fourteen of the interviews were recorded on audiotape, two responded face to face, but asked not to be tape recorded and two interviews were conducted by telephone and not tape recorded.

The factors listed on the interview schedules to help focus the thoughts of the respondents on the dissemination process, and which were repeated by the respondents in their answers, are shown in italics in the reports which follow. (Refer to Appendices A1 and A2 for the wording used to focus the interviews.)

Case study 1. Associate Diploma in Electronic Engineering

Two curriculum officers, a Study Area Leader and three lecturers were interviewed about this project (N=6). The original project coordinator had retired and was not available to be interviewed. None of the three senior interviewees were prepared to take responsibility for what had happened within the project, and the Study Area Leader at the time of the interview, who claimed that he had been “prevented from being involved after the initial meetings”, saw his current role as one of “trying to pick up the pieces”. His responses were given from the perspective of a user of the innovation and an observer of the process rather than that of coordinator or manager.

The three lecturers who had been involved rated the dissemination process (question 7) as *frustrating* (N=2) and *not useful* (N=1). One commented that this was a "good example of how not to go about dissemination". All listed negative feelings experienced when they embarked on implementation and only one mentioned "a few good initiatives" on the positive side. On the negative factors which were listed in the interview schedule (question 5), their comments were virtually unanimous. Table 4.1 sets out the frequency of response of the 3 lecturers to the negative factors given.

Table 4.1 Frequency of response from 3 lecturers

Negative factors	Frequency of response
Sense of isolation	3
Lack of communication	2
Too complex	2
Students suffered	2
Resources had to be produced	3

None mentioned *time delays* (question 5) as a negative factor and, in fact, the reality appeared to be the reverse: there was too much haste to have the curriculum implemented. Further comments on negative factors included the following: "there seemed to be no planning"; "no facility for feedback on problems with the syllabus"; "the curriculum was worse than it had been before"; "I had previously communicated my thoughts to the organisers, but my input was ignored"; "no time was allocated to prepare resources"; "the course was too hard for the level of student"; "the isolation was from Head Office, not from within our Department; we pulled it together well considering how bad it was".

All three commented in answer to question 6 (*How useful do you think each of these dissemination strategies might have been in helping you overcome any problems you had?*) that *staff development*, *meetings* and *time allocated for resource development* would have been helpful. Two added that *skills training*, *implementation planning* and *feedback role during pilot* would have been helpful.

When asked what suggestions they would make for improving the dissemination process if it were to happen again (question 8), the lecturers' answers included:

- development and implementation of a set procedure for reviewing the curriculum
- combined staff and industry meetings to discuss implementation issues raised by staff
- funding for time allocation for lecturers to be involved
- funding for time allocation for resource development
- evaluation and modification of course material
- more valid techniques for selecting less biased industry representatives on the advisory committee
- more authentic industry involvement
- industry advisory committee to be more representative of industry
- lecturers most intimately involved in subject areas working together to solve curriculum problems
- assessment of objectives of the course and working together to ensure that they are met
- feedback to TAFE from lecturers, with a plan for subsequent action
- more planning discussions between involved staff and seniors
- formal evaluation (of pilot) to obtain lecturers' and students' perspectives
- funds for resource development
- consolidation of resource development with new syllabus development
- sharing of materials between colleges and external studies
- smaller changes constantly fine tuned (not such large changes all together)
- well organised staff development.

The Associate Diploma in Electronic Engineering appeared to be far from successful and most of the interview input was negative. The reasons for the problems identified are explored in the second section of this chapter, and factors affecting the success or failure of dissemination are delineated.

Case study 2: The Certificate in Clothing Studies

Five people were interviewed regarding this project, namely, the Curriculum Officer, the project coordinator and three lecturing staff. All made useful comments. One lecturer was interviewed by telephone and was not tape recorded.

Two lecturing staff contradicted the other three interviewees, saying that: dissemination had been *frustrating* or *non existent*; although they knew that the

curriculum project was in progress, there had been no *staff meetings* and no *interaction between staff and industry*; they were not aware of any *communication strategies* to help staff understand or accept the new curriculum; and the *students suffered*. The other three interviewees were very positive, describing a high level of *involvement, frequent meetings* and *workshops, staff participation in writing curriculum materials* and *interacting with industry practitioners*, and a rating of the dissemination process as *helpful*. It was as though the two groups of interviewees were discussing two different projects.

The answer to the enigma became clearer in the three positive responses, when lecturers were asked how the dissemination processes might have been improved. The answers included comments like “there were disagreements between staff”, “there were problems with personal criticism between staff”, and “we really needed to look at better methods of conflict resolution”.

It is not possible to put the answers of the five interviews together to give a single clear perspective on the innovation process. There was obviously a deep rift between staff, with some lecturers feeling deeply involved and satisfied with the level of dissemination, while others remained alienated and antagonistic. This staff conflict is examined more closely in the following section, which discusses the factors affecting dissemination in detail.

Regarding positive or negative feelings at the time of implementation (question 5), the only response given specifically listed *lack of communication, students suffered* and *resources needed to be produced*. This was perhaps a rather mild response from one of the alienated lecturers.

When asked what suggestions they would make to improve the dissemination process (question 8, and questions 5 and 6 in the schedule for coordinators), the two alienated respondents mentioned:

- better rapport between industry and teaching staff
- staff being involved from the start
- combined lecturer-industry workshops.

The other three interviewees made the following comments about the project:

- worked well but the review was too ambitious, considering that there had been two major revisions within the past five or six years
- less radical change preferred
- more input from lecturers required
- personal problems from the last change still need solving
- better conflict resolution needed
- good strategies, but problems between staff
- better needs assessment needed
- follow up survey with students needed (ie, a pilot).

The Clothing Studies Certificate project team was divided severely and the responses gave two conflicting views on the success of the dissemination process. This and other influences on the project are discussed in detail under a later heading on factors affecting dissemination.

Case study 3: The Traineeships

Four people were interviewed about the Traineeship program. These were the Superintendent/Manager of Labour Market Programs, the coordinator of the Pastoral Traineeship and two lecturers from the Local Government Office Information and Office Studies Traineeships. One of the lecturers was interviewed by telephone and was not tape recorded.

The two senior people interviewed said that there was a dissemination mechanism in place for these courses and, while they referred to other problems, they were not aware that there were any problems with instructors not understanding or accepting the innovation. They both were concerned that the lecturers understood the ‘industry specific’ nature of the programs and believed that the measures taken to ensure this had been successful. One remarked in answer to questions on improving the dissemination process (questions 5 and 6 on the coordinator interview schedule), that “it is working

well; we are learning all the time; we will continue to improve our communication strategies." The other stressed a need to "review the package with lecturers before they teach it and reach compromises on difficult areas". In other words, they believed that dissemination strategies were in place, but that there was still room for improvement.

The two lecturers were not so happy. Both claimed to have had no staff development, no formal induction and no meetings with the industry working group. One had worked in previous Traineeships and was able to call on her earlier experience. However, both stated that the dissemination process was *not useful* and believed that more *staff development* and more *meetings* would have been *helpful* or *invaluable*. The newer of the two lecturers added that she would have liked more *feedback*, more help with *resource development* and better *planning of the implementation.*

One listed negative feelings about *participation, planning, support* and *resources,* and referred on several occasions to *a sense of isolation.* The other complained about a *lack of communication,* and referred to the problem of the 'Training Plan' not matching the syllabus document.

In answer to question 8, asking for suggestions for improving the dissemination process, the two lecturers mentioned the need for:

- advanced planning by TAFE for staff to attend meetings
- meetings between lecturers and industry to discuss the syllabus
- meetings, more communication
- meetings, reports or other types of formal communication to staff
- contact with industry working groups to see what they want
- a procedure to interpret objectives less subjectively
- evaluation and feedback from employers to lecturers
- more time to plan the curriculum delivery
- more time to plan use of new curriculum
- formal time allocation to produce resources
- information on what the Labour Market Programs section is doing.

One of the lecturers went on to comment, however, that “it is improving all the time”, and that “the Manager of the Traineeships provided me with a good initial understanding of the Traineeship system”, comments which reflected the perspective of the two senior staff mentioned earlier.

This project had the advantage of having a Superintendent/Manager appointed specifically to get the Traineeship programs up and running. It was, furthermore, a national initiative and reports were coming in from other States about its strengths and weakness. More was known about the direction of the changes than was evident in the previous two case studies. Even so, there were problems in the dissemination process and the two groups, the Superintendent/Manager and the program coordinator, on the one hand, and the lecturers, on the other, had clearly different perspectives about what they thought were the important elements of dissemination.

Case study 4: Screen printing and stencil preparation Trade Certificate

One of the two curriculum officers involved in planning this new apprenticeship course, the Head of Department and the sole lecturer in the program were interviewed (N=3). The Head of Department didn't see his role in disseminating this project as being significant and he declined to have his interview tape recorded.

The curriculum officer viewed the level of *industry liaison* as the most important strategy in the successful dissemination of this project. In answer to question 6 on the coordinators' interview schedule (*how might you change these strategies if you had to do it again?*), he stated that more attention should have been given to resourcing (as distinct from the development of teaching resources mentioned by the instructor) as valuable time was wasted on getting the new course housed and funded.

The lecturer rated the dissemination process as *invaluable* and *helpful* (question 7). He remarked on the importance of *staff development, meetings, planning the implementation, resource development* and *feedback during implementation* as

strategies of successful dissemination (question 6). The only strategy which he felt was irrelevant to him was *skills training*, as he already was well skilled in the new study area.

The feelings which he described when he began implementing the curriculum (question 5) were mostly positive, including *sense of ownership, participation, well planned, students responded well* ("although some segments needed to be reviewed") and *good support.* On the negative side, he mentioned the *lack of resource development* and the time and help which he needed to develop them.

The lecturer's suggestions for improving the dissemination process (question 8) mostly referred more strictly to implementation strategies rather than dissemination, but included:

- evaluation and feedback, involving students, employees and industry working group
- better, faster planning of setting up process
- continuing contact with a Curriculum Branch person to reduce isolation, and improve information sharing and fine tuning
- support with resources development
- completion of finalised curriculum document ("I only ever received a draft").

The factors bearing on this small but successful project and the significance of comparing it with the other three projects are discussed in the next section.

Factors affecting the success or failure of dissemination

From the data from the four case studies reported above, it is possible to identify factors which had negative or positive effects on each of the projects. A number of these are present in the schools related literature, but can be seen to have their own local TAFE flavour. This section looks in more detail at the factors of success and failure to emerge from the interviews, puts them in context and analyses how and why they affected the four curriculum projects.

1. Associate Diploma in Electronic Engineering

The most difficult project was obviously the Associate Diploma in Electronic Engineering. Six people were interviewed with regard to this project and it was not easy to obtain a clear and consistent picture of what happened and why. The factors which stood out clearly were lecturer frustration and intense criticism of what lecturers interpreted, in the context of this study, as poor dissemination.

One of the reasons was that the development, dissemination and implementation processes involved many different people and that there was no clear management or leadership structure in place. There were three different Curriculum Branch officers involved during the life of the project and various Study Area Leaders and Heads of Department moved in and out of positions of responsibility. The project coordinator went on long service leave and then retired immediately after the first stage documents were submitted for accreditation. No project continuity occurred and there was no single person to turn to at the dissemination stage.

There had been an industry advisory group involved at the needs analysis stage of the project, but it appears that it was divided from the outset as to the importance and detail which they wanted placed on new knowledge, such as micro electronics, as distinct from a more general approach to the field. The supporters of increased micro electronics content and the generalists grew into two distinct camps, which extended later into the TAFE arena and it appears that no common platform was ever reached before or after development began.

Another conflict, also related to the difficulty of finding a common platform, occurred during development as a result of disagreement with another Study Area over the mathematics units. This was a system wide issue at that time, in that TAFE had been trying to rationalise its offerings in subjects like mathematics, communication, basic business practices, etc., which were common to many different courses. This was the first exposure to the issue in the electronics area, and the reaction of the lecturers was

the same as it had been in many other subject areas (ie, they did not want to surrender their control of mathematics teaching to lecturers who were not familiar with electronics) . This problem originated outside the development project, but represents the kind of constraints within which curriculum projects have to work. In isolation. it would not have been important but, with so many other problems, it took on greater significance in the dissemination process.

There were further pressures from the TAFE Curriculum Branch in that the new course was the first to be submitted for State accreditation and national registration via the new guidelines set out at that time by the Western Australian Council for Tertiary Awards (WACTA) and the Australian Council for Tertiary Awards (ACTA). The course was meant to be a model in this sense and the pressure to push it through the new process was described as ‘intense’. A lot of time had been used in the early stages of the project trying to ascertain industry needs and, by the second half of the year, the timeline became unrealisable. A number of dissemination problems can be attributed to the speed with which the project had to be completed and implemented.

Another factor was the pressure from the TAFE Curriculum Branch to bring the new Associate Diploma in Electronic Engineering into line with new educational structures being recommended from national sources. It was to be semesterised and modularised and it was to be designed to allow for alternative entry points. It required new educational concepts and innovation in course structure and it is likely that very few people in authority were fully aware of the problems and pitfalls involved in this kind of change. This clearly affected dissemination.

Detailed syllabuses, materials and resources were not developed before lecturers began using the course in the classroom. Curriculum documents were developed to the stage where they were acceptable to WACTA and ACTA, but official course outlines and subject syllabuses had not been produced past the rough draft stage. Money and time for development had run out and the course had to be fully implemented by the beginning of the following year. As one lecturer remarked in despair: “At 8.30 am, at

the start of a new term and a new year, we were asked to start a brand new curriculum without notes or materials!" A staff development meeting (described by three interviewees, respectively, as a half day, one day and two days) was held near the end of the year, when teaching staff saw the draft curriculum documents for the first time. The objectives of the meeting were far from clear. Some interpreted it as an opportunity to discuss the new course and to make suggestions for changes. The curriculum officer saw the meeting as a dissemination exercise, after which lecturers were meant to start preparing to teach the new course for the beginning of the following semester. Nobody interviewed seemed to know who was supposed to develop the syllabuses and prepare the necessary resources. One lecturer, who had been at the staff development meeting and had assumed that there were still many months of development to be done, claimed that he was amazed to be handed the same 'sloppy documents' at the beginning of the semester and expected to begin teaching from them that day.

A further factor influencing the break down of the dissemination process in this project was the size of the Study Area. There were 5 or 6 colleges and about 40 lecturers involved in the implementation and, with so many factors working against the success of the project and with no apparent leadership, the chances of improving communication and getting lecturers to accept and understand the course at the last moment (during the Christmas break, in fact) were negligible.

The factors affecting the apparent failure of the dissemination of the new electronics project can thus be summarised as:

- lack of clear and constant leadership, lines of management and accountability
- failure to establish common goals, or a platform of values, either before or after dissemination began
- pressure from TAFE Curriculum Branch to have the course accredited under the new system
- conflict between TAFE policy and the wishes of the users over the rationalisation of mathematics teaching
- the complexity of the project, involving new content and new educational structures simultaneously

- lack of clear staff development procedures
- lack of input from users
- lack of teaching resources or allocated time to prepare them
- unrealistic timelines.

The odds were heavily against the new curriculum. There were too many factors wrong throughout the process to expect a miracle to occur between the time of completion of the official documents for accreditation and the beginning of implementation. The fact that lecturers were still patching and changing and trying to make more sense of the course four years later is evidence enough that good course development cannot occur without due consideration being given to strategies to help the users understand and accept the innovation on their own terms.

2. The Clothing Studies Certificate

The Clothing Studies Certificate grew out of the fashion and design course which had undergone a major review and restructure five years earlier. Some of the more difficult features of the new project had their origins in the earlier project. Fullan (1991) mentioned the history of an individual's, or school's, experience of curriculum development as a factor in the success of further educational change. The earlier fashion and design curriculum had been devised at a time when the fashion industry in Western Australia had been very much in its infancy. A major industry review in the accepted sense had not been possible then and the earlier development team had sought data from interstate, from graduate students and from instructors, to establish some the needs of the earlier course.

One advantage from the earlier course was that it had been restructured on modular lines. While many were critical of the interpretation of modular design introduced at that time, one of the major educational changes which had plagued the electronics development project had been dealt with already in the Clothing Studies area, leaving less new features to cope with at one time.

A further element in the history of curriculum development in the fashion study area was that the department had gained a reputation for volatility and potential for conflict. It is not surprising that conflict erupted during the clothing studies development and became one of the more significant features affecting development, dissemination and implementation. The conflict grew out of a demarcation between *production* and *design* and eventually split the department into two.

The inclusion of fashion design had been one of the significant features of the earlier development, and the design lecturers were very proud of the fact that some of their better design students had gone on to obtain employment as fashion designers interstate and overseas. However, there was little call for fashion designers on the local scene and one of the criticisms from industry was that the much of design being taught was irrelevant to local needs. The project coordinator saw the split more in terms of one between art and fashion. The design lecturers, he said, were artists and did not have close ties with the clothing industry. The conflict widened to include industry and staff and alienated some staff members irreparably from the development process. One interviewee, a senior lecturer in fashion design, interpreted the dissemination process as a ‘complete disaster’, partly because she saw the project as stacked against her from the beginning, and also because it posed a threat to her job. She stated that she had not been informed about what was going on, was not invited to participate and had no involvement until the curriculum documents were handed to her to teach at the beginning of the new course. If the situation had persisted, conflict might well have harmed the new Clothing Studies Certificate course irrevocably. However, a compromise was reached eventually when the senior lecturer was appointed to develop a new fashion design course under the auspices of the Art Department in another college.

The third important feature in the dissemination process of the Clothing Studies Certificate course, and the most important factor in its eventual success, was its development team structure based on a close industry and staff network which, to the

interviewees who responded positively, was regarded as a model of good dissemination practice.

The project began with a survey of 26 companies, which revealed that industry was not happy with the graduates from the existing fashion production and design course. A series of workshops was held, incorporating the DACUM occupational analysis technique (an acronym derived from the words ***D****eveloping* ***A C****urricul****um****,* a group decision making technique developed in Canada and used frequently in TAFE in Australia) and the rewriting of job profiles. These were followed by workshops for selected industry operants and lecturing staff, who together drew up course objectives. Staff representatives at these meetings then reported back to the rest of the staff, distributing the draft documents and eliciting comment and criticism. Many of the staff were involved in writing the subject outlines and their ownership and acceptance of the materials thus was guaranteed in advance. The success of this technique was evidenced by a new level of trust and interchange between industry and lecturers, with the way opening up for instructors to move back into industry and new lecturers being brought in from industry. The project coordinator remarked that one of the most critical people from industry now was sending his daughters to the college to study the new course.

The three factors affecting the dissemination of the clothing studies course can be summarised as:

- the history of curriculum change
- staff conflict
- the close network of industry TAFE participation and decision making.

The history of curriculum development in the Study Area had both good and bad influences. Staff conflict was harmful, and the industry-TAFE development network was no doubt the most important feature in the eventual success of the project. Overall, the project must be regarded as successful, although some staff were badly hurt and one eventually left the college.

3. The Traineeships

The Traineeships were part of a national initiative to help young unemployed people improve their chances of employment by offering them a structured program of on-the-job and off-the-job experience and training in a chosen field. National guidelines for course development had been in place for a number of years and required students to enrol for a year, with 13 weeks college based training and 39 weeks of hands on experience in the field. The Department of Employment, Education and Training (DEET) contracted TAFE Labour Market Programs division (as it was then) to organise and teach the college based component.

Dissemination of new Traineeship programs to both instructors and industry personnel had at least one classic feature. The courses required *cultural change* in the sense that instructors must alter some of their preconceived ideas of teaching and learn to think very specifically in terms of coordinating their objectives with industry requirements. Industry, on the other hand, had to learn to be more receptive of training concepts and the achievement of specific learning, as distinct from treating the students as cheap labour to do odd jobs. A ‘Training Plan’ was provided to both lecturers and employers and the students were expected to make their way through it without too many digressions.

These concepts needed to be disseminated so that instructors and employers understood and accepted what was expected of them and there was a mechanism in place to do this. According to the coordinators interviewed, TAFE and DEET worked together to organise induction programs to disseminate these concepts to newly selected employers and instructors. The majority of new instructors had had previous teaching experience in TAFE, some in mainstream training areas and some in Access or special courses for unemployed or minority groups. The program coordinator believed many of the instructors' earlier preconceptions had to be undone. Referring in particular to the non-industry specific subjects, such as communications, mathematics and personal effectiveness, the coordinator explained that instructors had to learn to

refocus their teaching on skills essential to the job rather than broader educational skills. For this reason, new staff needed to be helped to understand their new role. The Pastoral Traineeship interviewee referred to a three-week induction course at a farm near Yanchep. Another mentioned the train-the-trainer scheme which had been introduced to disseminate this cultural change. The scheme, however, had arrived too late to assist the lecturers interviewed.

The two lecturers interviewed described their sense of isolation from the decision makers and industry groups and their lack of resources and materials or the time to develop them. They had their Training Plans to work from, but they typically felt isolated in having to devise so much new work without the ongoing support from the industry group which had drawn up the objectives. It appeared that another level of communication was needed during the course writing stage, so that employers and teaching staff could have been of more assistance to each other.

The discrepancy apparent in these two sets of answers could have been more to do with a time difference rather than differing perceptions. What had been a negative factor for the two lecturers 18 months or so earlier had been dealt with, it was claimed, and had become a positive factor by the time of the interviews. The reform was a step in the right direction, but the two teachers in the study were not the right people to talk to about it.

The negative and positive features of the Traineeships affecting dissemination, therefore, can be seen as:

- lack of staff development
- poor communication systems with coordinators and industry
- problems in developing teaching materials
- later introduction of these processes by way of generous Induction Programs

The Traineeship programs can be considered as having mixed dissemination success. The claims of the lecturers that there had been serious problems when they joined the

scheme must be regarded as a failure of the dissemination process. The claims of the Superintendent/Manager that the new Induction Programs had solved all of the earlier problems were not able to be checked through further interviews with lecturers beginning in new programs more recently.

4. Screen Printing and Stencil Preparation Trade Certificate

Screen Printing and Stencil Preparation was a new Trade Certificate course developed in response to identified industry need. It had been discussed for a number of years before TAFE Curriculum Branch decided to go ahead with the development. It was the most successfully understood and accepted program of the four studied.

The factor most in its favour was that it involved a very small development team. It can be argued that the project actually did not require any dissemination in the usual sense of the word. However, the change system had to be in place and the industry advisory committee expectations and decision making procedure made understandable and acceptable to the user. It was also valuable to administer the interview schedule to people involved in such a simple project and to compare the answers with those of the other more difficult projects. Bearing in mind that even small-scale innovation can fail, the exercise helped focus on the identified factors in a positive sense, confirming them as relevant to the research. The Director of the TAFE Curriculum unit, who recommended this project to the researcher, possibly was not aware how small it was, but had noted that it was relatively problem free and successful in its path through the accreditation process.

There was a three-person industry advisory committee which remained constant and committed throughout the project. One member of the committee eventually became the course instructor. Curriculum officers did change during the project, but the change was not seen to be as disruptive as it might have been, as the two different officers dealt with different and easily distinguished stages of the project.

The development contained its own dissemination because of the close interaction of the TAFE-industry-instructor development team. Certainly the instructor who began teaching the course nine months later had a strong sense of ownership and involvement and the implementation problems which he did experience he regarded as his problems rather than those of the curriculum process.

The instructor interviewed stated that there were developmental and implementation problems, and that they largely concerned his lack of lecturer training and materials development expertise. He found individuals to help with both of these areas and saw the assistance which he received in terms of his own professional development, rather than as communication or ownership problem of the curriculum process.

There were also TAFE-generated organisational problems in housing and resourcing the course, but once again the instructor didn't interpret these in terms of curriculum change so much as organisational challenges to be overcome. This development team might be seen as the least sophisticated of the projects studied. On the other hand, there were no negative ingredients from the point of view of the dissemination and implementation process and it was by far the most successful and happiest of the projects researched.

The factors influencing the success of this project were:

- tightly organised tripartite development team
- clear roles and a common platform
- few people involved
- no difficulties in the level of communication between team members.

The smallest and most successful project no doubt had advantages over those where many more people had to be informed and supported. However, by contrast with the other three projects, the smaller number of people involved in the team had little problem in reaching agreement on a common platform of values and directions and were not hampered by poor communication or lack of support.

Definition of factors affecting dissemination

From this pilot study, it was possible to identify the factors important to the level of success of curriculum dissemination in the TAFE context in Western Australia. The isolation of these factors was necessary to provide base data on which to build the next stage of the research. The case studies described above pointed to a number of general positive and negative factors, which can be summarised as follows:

Positive factors

- industry and lecturer participation
- tripartite development team
- information sharing throughout project
- shared decision making
- teacher input
- previous experience with successful innovation
- attention to cultural change
- staff development
- contact with genuine industry representation
- realistic time for materials development
- realistic time release for development of materials
- clear roles for coordinators and decision makers
- clear roles for lecturers
- common platform of values and directions
- high level of communication with end users
- constancy of leadership
- mechanisms for feedback when implementation starts.

Negative factors

- lack of clear and constant leadership
- failure to establish common goals
- lack of platform of values and directions
- time pressure from outside project
- conflict between TAFE policy makers and curriculum users
- complexity of change
- lack of staff development
- lack of clear staff development procedures
- lack of input from users
- lack of teaching resources
- lack of time to prepare materials
- unrealistic timelines
- unresolved staff conflict
- poor communication with coordinators and industry
- sense of isolation.

A detailed analysis of the interview records revealed that most of the difficulties identified could be seen to fall into six distinct groups of problems. These were needs analysis, staff involvement, resource development, the complexity of the change, staff development and feedback. A more detailed listing of the factors was made from the interview records and sorted into related groups under these headings. This list, redrafted as a list of lecturer needs statements, is given below:

Needs analysis, occupational analysis
- Combined staff and industry meetings to discuss issues raised by staff
- Valid techniques for selecting industry advisers
- Authentic industry advisers
- Better rapport between industry and teaching staff
- Joint discussion of syllabus by lecturers and industry
- Procedures for interpreting objectives with industry group
- Combined industry-lecturer workshops
- Meetings, reports, formal communications between staff and industry people
- Conviction by staff of the validity of the innovation
- Conviction by staff that the needs assessment is relevant

Staff involvement
- Improved communication strategies
- Advanced planning to enable staff to attend meetings
- Planning discussions between lecturers and senior staff
- Staff involvement from the start
- Share of ownership by staff in the development
- More lecturer input
- Funding for lecturers to be involved

Resource development
- Resources and teaching materials to be developed before implementation
- Time for development
- Funds for development
- Responsibility for resource development by curriculum team
- Nomination of lecturers to develop teaching materials
- Development of lecturers' own materials using the completed syllabus documents
- Opportunities for lecturers to see and discuss other people's teaching materials
- Common development of materials with external studies resources

Complexity of project
- Smaller number of changes at one time
- Less ambitious change all at once
- Less large radical changes at one time
- Smaller numbers of problems all at once
- Awareness of staff to systemic changes before significant innovation begins

Staff development
- Well organised staff development
- Early staff assessment of objectives
- Opportunities for staff to give feedback
- Conflict resolution required early in development
- Assistance with staff conflicts early in change process
- Conflict resolution techniques

Feedback
- Continuing contact with organiser
- Feedback and review mechanism needed
- A set procedure for reviewing the curriculum
- Evaluation and modification of course materials
- Evaluation and feedback to industry on implementation
- Subject experts to work together to solve problems
- Staff working together to ensure that objectives are able to be met
- Formal evaluation needed during implementation
- Follow-up surveys needed on implementation

Some of these statements overlap and even contradict others, but they represent the expressed needs of lecturers involved in curriculum change. The list presents a clear picture of the kind of improvements needed in the change process. Most of them could be incorporated into a dissemination strategy which aimed to inform lecturers of the requirements of change in such a way that they understand and accept the change. This list also provides data on which the survey questionnaire could be designed for the next stage of this research, as was discussed in Chapter 3.

General findings related to the dissemination process

The data above suggest that not enough attention was given to the process of dissemination in the four projects studied. Participants in three of the four projects expressed a level of discontent and in some cases the criticism was extreme. In all projects other than the Traineeships, dissemination had not been considered consciously as an issue in the process of change. In the Traineeships the need for alteration in the way lecturers approached their work in traditional classrooms had been recognised and provided for. Even so, the provision of Induction Programs was narrowly focused on the one defined need and the lecturers interviewed had not been

helped particularly in understanding and accepting the new courses they had developed and implemented.

The Induction Program for the Traineeships and the joint staff-industry development team for Clothing Studies Certificate are examples of good strategies in place, but they were inspired by specific needs at specific times and did not emanate from TAFE policy direction or from a knowledge of the importance of dissemination as part of the curriculum change process. Nor did they extend to all lecturers in these projects.

The interviews confirmed that it is difficult to isolate a discrete process of dissemination. Lecturers, project officers and curriculum officers were unable to interpret dissemination as a single strategy, or to identify a series of tactics affecting dissemination. They interpreted dissemination rather as the system of communication throughout the entire process. It was the communication process many of the interviewees were criticising. *Informing* lecturers about change taking place in their teaching areas was interpreted as a much less complicated activity in these four projects than had been envisaged in the definition of dissemination given in Chapters 1 and 2 of this thesis. However, even judged by these simple, non-demanding standards, the processes on the whole were not successful.

Lecturers grappling with the concepts of *understanding* and *accepting* saw it in exactly those terms, understanding and accepting, and did not distinguish between any particular stages or tactics used. Those who did understand and accept the innovation when implementation began were happy about their level of involvement in the development process, while those who hadn't understood or accepted some part of the project attempted to explain their frustration in terms of lack of trust, lack of involvement and lack of communication throughout the process. They spoke of the whole curriculum development project and their opinions of the players and processes throughout, as well as their reaction to the final curriculum document which was put into their hands to teach. What this research saw as dissemination problems, the users saw more generally as lack of communication.

The interviewees' interpretations of the success of dissemination was uneven, even within the same project, depending on their perspectives or their degree of involvement. Those whose ideas had been listened to in the developmental stages, or those whose philosophies coincided with the changes, were happy, while those who hadn't been given an opportunity to debate the issues, to give input, or even the chance to change their points of view, were the ones who didn't accept or didn't agree with the changes. Conflict situations, furthermore, which might have been identified early in the process and dealt with by using known dissemination strategies, festered and grew in one case in particular, causing open frustration and anger at the point where lecturers had to begin teaching.

There has been an unexpressed belief in TAFE curriculum development that dissemination processes will look after themselves, that *diffusion* will occur naturally and that lecturers will use their experience and training to overcome any problems which they experience in accepting and understanding the new materials. Management styles have been geared towards getting the development finished, or meeting deadlines and completing the formalities of registration and accreditation. The pilot study indicated that little planning had gone into convincing the users that the curriculum materials were valid, or that they had a right to a share of their ownership.

The lack of training in, or awareness of, change management was stark. Nobody seemed to be responsible for smoothing the way to implementation or for overcoming the most obvious problems. Leadership skills were apparent from individuals within the Clothing Studies and Traineeship projects, but did not reach far enough to encompass all those concerned in innovation. In the case of the Clothing Studies Certificate project, open staff conflict was problematic.

The pilot study confirms that dissemination is a necessary, but neglected, component of curriculum change. It suggests that measures could be taken to raise awareness of its importance and opens some directions on how it could be achieved successfully.

Conclusion

The pilot study set out to achieve three things. First, it explored the dissemination experiences of those involved in curriculum innovation and identified the issues which they considered important. Second, it sought to validate the hypothesis that poor dissemination practices were creating unnecessary problems for TAFE lecturers involved in change. Third, it was to provide data on which to base the design of a research instrument for surveying TAFE lecturers more widely.

The four case studies brought to life the issues of dissemination neglect. Most of the people interviewed had quite a lot to say and their insights painted a clear picture of the processes and practices which had affected them. The hypothesis was proved valid. Not only was there neglect of the dissemination process and poor change management practices in the TAFE system but, in some cases, it was causing untold frustration, anger and confusion. The issues proved to be more emotionally charged than could have been anticipated prior to the interviews and it appeared that the interviews had touched some very sensitive nerves. The data collected produced abundant material on which to design further research. The case studies clearly identified the factors which those interviewed believed could have improved the dissemination process and made implementation more efficient and less stressful. The interviews produced a list of important dissemination factors affecting teachers involved in change and most of these could be incorporated, not only into a questionnaire to be used to research more widely into the defined issues (as is described in Chapter 5) , but also into the design of a change strategy to be tested in the field (as is described in Chapter 6).

The next chapter deals with the second stage of the research, namely, a questionnaire survey developed from the findings of the case studies and involving a larger number of TAFE lecturers and their views sought in greater detail on the importance of a number of defined factors of change.

Chapter 5

The questionnaire survey

The shame of educational change is the squandering of good intentions and the waste of resources in light of personal and societal needs of great human consequence.
(Fullan, 1991, p.345)

Of the three distinct stages in this research defined in Chapter 3 (Figure 3.1), Chapter 4 described the first stage, the pilot study. The pilot study consisted of four case studies which were used to collect preliminary data on dissemination factors affecting curriculum change. This chapter describes the second stage involving the administration and analysis of a questionnaire survey of a wider sample of TAFE lecturers who were involved in curriculum change.

The purpose of the questionnaire survey was to ascertain the views of TAFE lecturers about the importance of specific dissemination factors which had affected the innovations in which they were involved. The design and trial of the questionnaire was discussed in Chapter 3 and the modified version used in the survey can be found in Appendix C1.

The questionnaire survey was designed to collect three kinds of data. First, the respondents were asked to rank 53 statements on the dissemination process in order of importance, initially as the *preferred,* or ideal, situation and next as the *actual*, or as it really occurred in their experience of innovation. Second, the questionnaire also included space for open-ended comment so that the respondents could explain or add to the questions on the dissemination process. Finally, there was a section requesting personal information and individual perceptions on the nature, size and complexity of the innovation itself. The following analysis deals with this last section first, followed by the open ended responses, then the *preferred* and *actual* situations.

The survey was to extend on the list of factors collected from the case studies and to provide the main data on the importance of the various aspects of the dissemination process, as seen from the perspective of the implementers.

Personal and innovation data

The final page (p.7) of the questionnaire asked a series of questions about the respondents and the innovation in which he or she was involved. Refer to Appendix D1 for full details of the personal and innovation data received from this section of the questionnaire survey.

Forty-three of the 53 respondents were identified as full-time lecturers and seven as part-time. (Three did not respond to this question.) The number of years that they had been teaching ranged from less than 1 to 37 and the average duration was 13.6 years, indicating a well experienced group. A question about the length of time that respondents had spent on the innovation was included to double check information on the currency of the project, but it frequently was interpreted to refer to the subject area and not the innovation, and the answers were not relevant. Twenty eight (53%) of the respondents identified themselves by name and telephone number, and stated that they would be prepared to be interviewed in more detail later. This is a surprisingly high number, particularly from busy lecturers under pressure of work, and this appears to indicate a high level of interest in the issues of this research.

The overall conclusion from this part of the study was that the majority of lecturers believed that the change had been necessary and that they were happy to be part of it, but that they had been given very little support and that the experience had been unnecessarily stressful. Table 5.1 indicates the respondents' perspectives of the innovation in which they were involved. (See also Appendix D1).

Some answered positively to the first two of the questions listed in Table 5.1, indicating that they believed that the course was both new and revised. It must be

assumed that in some cases revised subjects were included in new courses, or that new subjects were included in revised courses. The replies cannot be checked against any measurable criteria, and indeed the individual projects cannot be identified from the answers, but they do indicate that a large number of respondents believed they were engaged in a number of changes at once. This is confirmed by the figures in Table 5.2, which shows the responses on the size and complexity of the projects.

Table 5.1 Positive responses about the innovation (50 responses)

Questionnaire item	Frequency of 'yes' response
Was it a new course/idea?	38
Was it a revised course/idea?	20
Did it include new content?	39
Did it include new course structure?	45
Did it include new educational ideas? (methods, delivery, entry and exit points, competency based approaches, etc)	45
Did it include new ideas from industry?	29
Did it include new technology?	30
Did it include new industry practices?	25

Table 5.2 Positive responses about the size and complexity of the innovation (47 responses)

Questionnaire item	Response	Frequency of 'yes' response
What size was the change?	large medium small	31 13 3
How complex was the change?	very medium slightly	26 16 5

When respondents were asked whether they saw a need for the change, 40 replied *yes.* 9 replied *no* and four did not respond. A number of the affirmative answers was supported by comments such as "courses need to be dynamic", "advanced students were losing motivation", "existing course excluded many potential students and did not fill the needs of employers" and "the syllabus had been inappropriate". Three of the nine opposing the change suggested that the old course could have been upgraded without the additional fuss and complexity, or that the new course was essentially no

different from the original. For a complete list of responses, see Appendix D2: Answers to question: *Did you see a need for this change?*

Questions about the amount of support given (see p.7 of questionnaire in Appendix C1) elicited some telling answers. Lecturers were asked to comment briefly on personal, financial and material (resources) support. Their answers are set out in Table 5.3 and tell their own story. In a number of these answers, there can be seen the frustration experienced by the implementers, and their feelings of alienation from DEVET (now the Department of Training) management and administration. There appeared to be good support at the college level in many instances, but this was tempered by a widespread concern that if lecturers didn't do everything for themselves, it wouldn't be done at all.

Table 5.3 Lecturers' comments about amount of support given

Personal support	Financial support	Material (resources)
Lots of support from team members, but not enough people for the task or time	?	The crunch is coming now
Very little	Very little	Very little
Excellent support from coordinator	$8000 grant for purchase of resources	
Very little staff development was offered before implementation	Where did all the money go?	Little prior development of equipment undertaken, use of new delivery technology minimal and expensive
Minimal due to remote location	Barely adequate	Barely adequate
Nothing	Nothing	Very little
None. I did it for benefit of my students, to explain further and to give them more practical experience for industry		
Yes	Nil	Some
Local staff	Minimal	As required
Considerable support from colleagues & college	Normal 30 hr week	Yes opportunities still not expanded to meet new technologies
Very little, majority work completed in my own time		Everything required for the course was provided, no problem with the purchasing, but resources needing development were undertaken in my own time
Sufficient	Contract basis	Adequate
Good level of support from other staff	Nil	Limited
Average	Some	Average
None	Very limited	None

Very little - no staff development in CBT yet	Very little	Not sure of extent of resources to be developed
Nil	You're joking!	Good, but develop your own
Nil	Nil	A few reference books
Little direction or guidance	N/A	Little direction or guidance
Good support from other lecturers who had previously used the package	From college - good support	Some small adjustments necessary to accommodate WA syllabus
Support from senior staff	None	Gradual acquiring of equipment needed but still not complete after 18 months
Very little	Reasonable for writing syllabi only	Only typing
	Basic time allowance was provided	
None	Not on a personal level	Not all requirements for the course have been purchased and available for purchase
Available if I asked but not offered	Limited	Nil
Nil	Minimal	Nil
Quite a lot - especially with Assoc Diploma modules	Very little, we did it all on less than a shoe string	
Nil		
Assistance from other staff members - team was tremendous	No financial support was provided	All that was required was provided
Almost none	Nil	Nil
Little	None	Little
Very little	We applied for staff development funding, but little was forthcoming. It appears "if it costs money" no one listens or wants to know	As usual we had to scrounge 2nd hand material, and devote personal time to their development
Colleague interaction very good	Very little for development	OK
Good	Good	Good
None, or extremely limited	None	None
Senior lecturer level good: Rest?	Nil	Senior lecturer level good
Ideas, assistance & suggestions given from other staff	N/A	Freely accessible and available
Plenty of staff development	Initially some money was available for resource development, but it quickly dried up	
Adequate	Some	Very little
Staff from other departments were helpful where possible	Some money was released to produce work booklets	-
Nothing negative, but only marginal positive support	Small seed money	Small seed money
?	Time?	Time to revise external courses
minimal	minimal, if any	apart from broad based modules, zero

Open-ended comments

The following quotations have been selected from answers to the questionnaire item asking respondents to comment on how they felt about the innovation (p.7 of the questionnaire). Positive and negative comments occurred in roughly equal numbers, while the majority were a mixture of both. The following comments confirm the observation made above that the majority of teachers were happy to be part of the innovation, but critical of the dissemination process. The complete data relevant to this question are included in Appendix D3.

> I like it! The major problem was a lack of time to develop it. Students were being enrolled in the course while staff were trying to come to terms with it. Currently we are trying to maintain the course while attempting to develop it.
>
> The concept and philosophy of the change is good. The *actual* process was very poor. The implementation and planning lacked any direction or guidance.
>
> The idea is great but the program still requires major changes and the software is unsound with a lot of scope for error in transforming data.
>
> Great, but a little trepidous about content and the number of hours allocated in modules could be either too little or too high. No pilot study has been conducted, but I believe that evaluation will occur at a later stage.
>
> I enjoyed the development and the teaching of a course relating to new technology. I feel frustrated by the lack of support (or maybe it is just indifference) from the management.
>
> The concept was overdue, but resources to apply to the new courses have been very hard to come by. No time was given to develop lecturer skills on new software.
>
> Not enough time and resources given prior to implementation. Every ... training centre in Australia is 'reinventing the wheel'.

Many of the positive comments indicated an excitement about new educational ideas, like modularisation, open learning, self pacing and new technology, citing advantages like better motivational material, greater concern for individual differences, improved learning flexibility and the challenge of being involved in a totally new concept. One respondent was so excited about the innovation that she wished that they could "go on and develop more modules for more courses" (Appendix D3).

Negative comments indicated discontent about the low level of support during implementation, the rush to start teaching, lack of resources, lack of money and lack of appropriate staff development. Others decried lack of piloting, problems with assessment, structural problems with the new course and lack of integration in planning. Some were suspicious that the changes were not those required by the industry and that feedback from students in industry had been critical. A minority used emotive phrases like “stressed to the maximum”, “very poor implementation planning”, “poorly conceived”, “no planning, no piloting, no money, no resource development and little, if any, staff development – in a word, lousy!” (Refer to Appendix D3 for a complete record of responses to this question.)

The picture overall was not completely pessimistic, but there are too many problems identified in too many projects to conclude that dissemination and implementation processes have improved since the pilot study was conducted a number of years before. These problems need to be analysed and explored and, if possible, eradicated from the change process altogether, so that teachers more easily can accept and implement change without the trauma it too often causes.

The second group of open-ended comments came from the two sections on pages 3 and 6 in the main questionnaire, which invited the respondents to comment or expand on the responses which they had made to the dissemination statements. Forty-seven relevant comments were received from 32 respondents and these, focused as they were specifically on the dissemination process, were more critical, more cynical and more emotional than the comments discussed above. In fact, there wasn't a positive comment among them, and several displayed extreme frustration and cynicism. The complete list of comments makes cheerless reading (see Appendix D4). A sample of these comments is provided below:

> Restructuring of TAFE, and the implementation of these modules at the same time, ensured a complete foul up of the interaction of employers, students, lecturers and administration. Implementation of both competency-based training *and* flexible delivery, in our present administrative and economic climate, ensured frustration and

> low morale. After three years, we are still waiting for administrative decisions on roll creation, assessment, recording of results and problems of development and delivery.
>
> Lecturers are the most concerned with delivery, yet they are often the least consulted. In my experience, curriculum development is based on administrative convenience and not on desired educational outcomes.
>
> Unfortunately very little of the *preferred* situation actually occurred. I am in a remote college and there was very little discussion with the metropolitan Study Area regarding the new course. It seemed to be rushed through.
>
> Too often new courses are developed with content inappropriate for industry application. They are developed by theorists who have no involvement with the workforce. Also, new courses are implemented without adequate staff development to assist teachers with the objectives and the intentions of the changes.
>
> Since joining TAFE, I have been disappointed with their professional approach to preparing their own staff to do the job for which they are employed. In most cases, you are handed a stack of material and told to deliver it.
>
> It was thrust on us with virtually no input from lecturers in Western Australia – like it or lump it, here is the stuff from the East! It was badly planned, poorly implemented, under resourced, hard to follow, – a load of garbage rejected by industry and by the union. We in Western Australia have had to develop, rethink and redesign our resource material to fit a course of study which has no clear assessment procedure or validation program, and we've had virtually no staff development. TAFE has been left to carry the can with a course on which industry and the unions have yet to agree – poor TAFE and poor lecturers!
>
> Literally, we had no input to this new system, no knowledge of it or its implications and no resources until November 1990, when we were told that it would commence in February 1991! We are slowly developing resources with minimal funding and no time allowance. We teach courses in Management of change. It is a pity that we do not practise it!

Comparison of preferred and actual factors

The *preferred* and *actual* situation questionnaires were designed so that the lecturers would consider the ideal first before applying the questions to what really happened in their own experience of curriculum innovation. The questionnaire was sent to 100 lecturers involved in innovation and 53 responses were returned. As discussed in Chapter 3, only 40 respondents completed both the *preferred* and the *actual* sections correctly, due to some misunderstanding of part of the questionnaire. Thus, the two parts of the following data and analysis are based on these 40 responses.

The responses to the *preferred* and *actual* situation questionnaires produced two types of data. First, from a comparison of the *preferred* situation with the *actual*, it was possible to ascertain that there were important differences, and how great the differences were for each item. It also was possible to isolate specific factors for further interpretation and comment.

Second, an analysis of the *preferred* situation by itself produced a list of factors considered important by the users. These were ranked in order of importance, and further grouped to provide clear evidence of those activities requiring greater or less attention if the TAFE curriculum dissemination process is to be improved. The same 40 responses used in the comparison of *preferred* and *actual* situation responses were used for this, as there remains doubt about how well the 10 other respondents who answered the *preferred* and not the *actual* questions understood the requirements of either part of the questionnaire.

The first part of the analysis of the questionnaire involved a comparison of the *preferred* and *actual* responses, on the assumption that, if any factors were shown to be less important in the *actual* situation than their counterparts in the *preferred*, they might be identified as needing improvement.

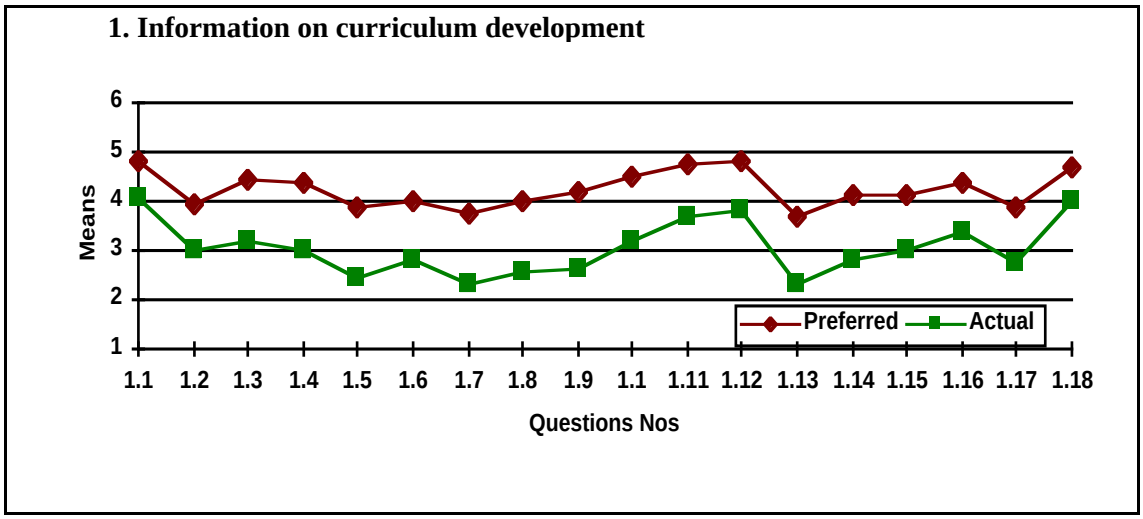
The five-point rankings for each item from both parts of the questionnaire were added and divided by the number of responses, giving an item mean score in each case to two decimal places (see Appendix D5 for raw data on responses and means of actual and preferred situations). The item mean scores for each question became the data from which visual comparisons between the *preferred* and *actual* situations could be made by means of graphs (Figure 5.1).

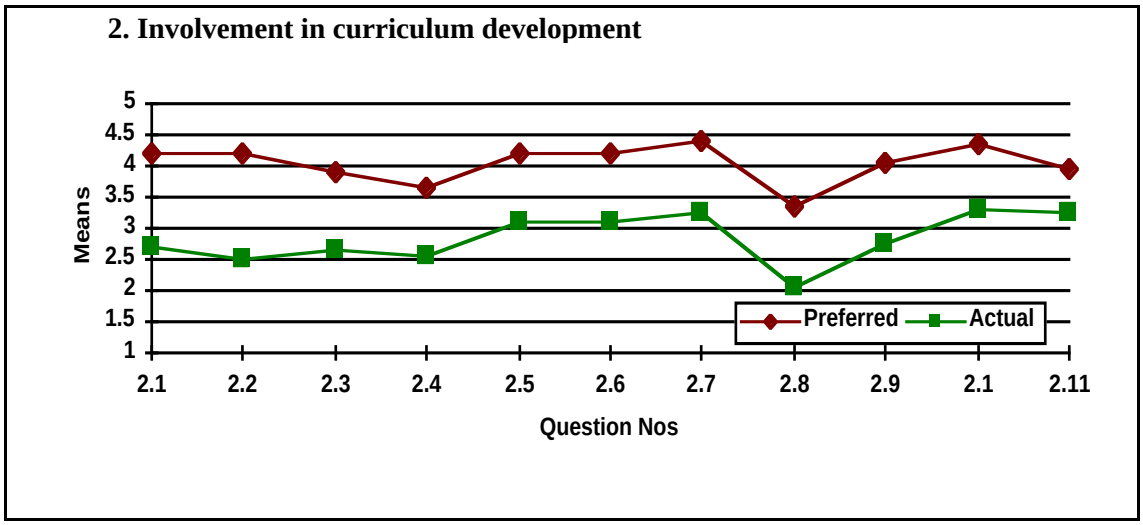
In contrast to the ranking of the trial questions referred to in Chapter 3, the responses asked for in the survey questionnaire were based on a five-point scale for which 1 represented ‘least important’ and 5 represented ‘most important’.

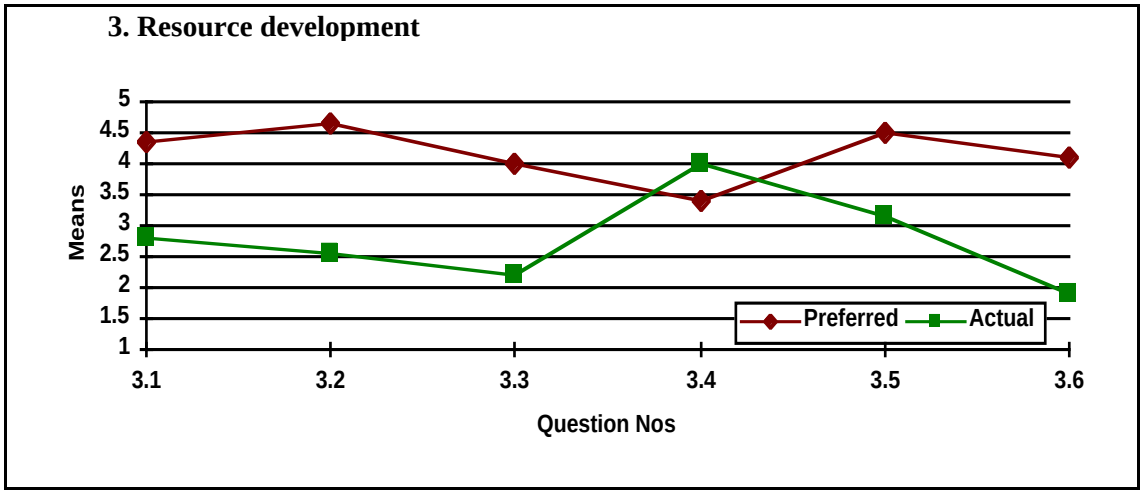
Figure 5.1 Comparison of preferred and actual situations

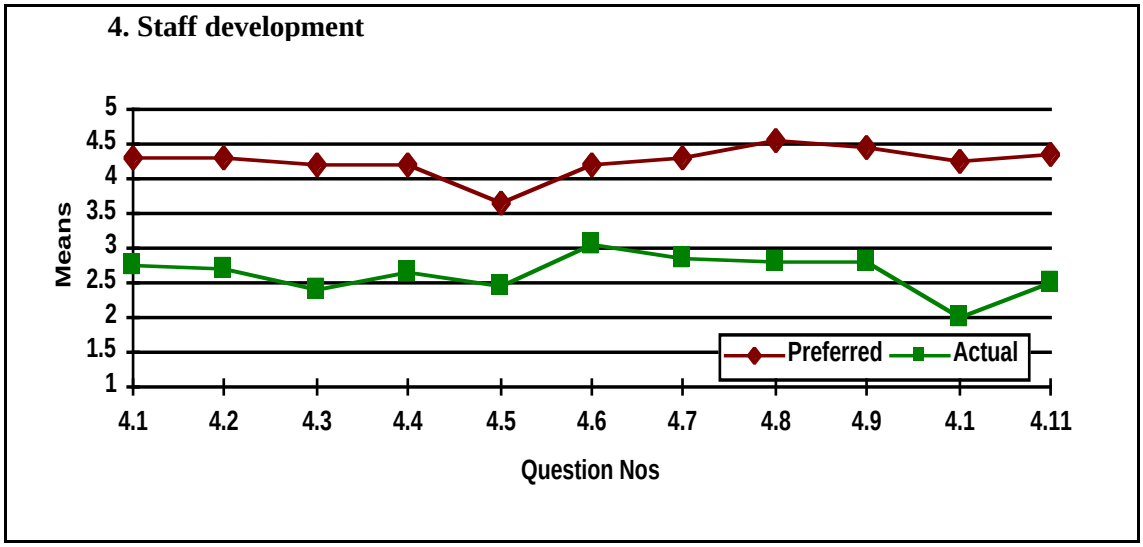
1 = least important, 5 = most important

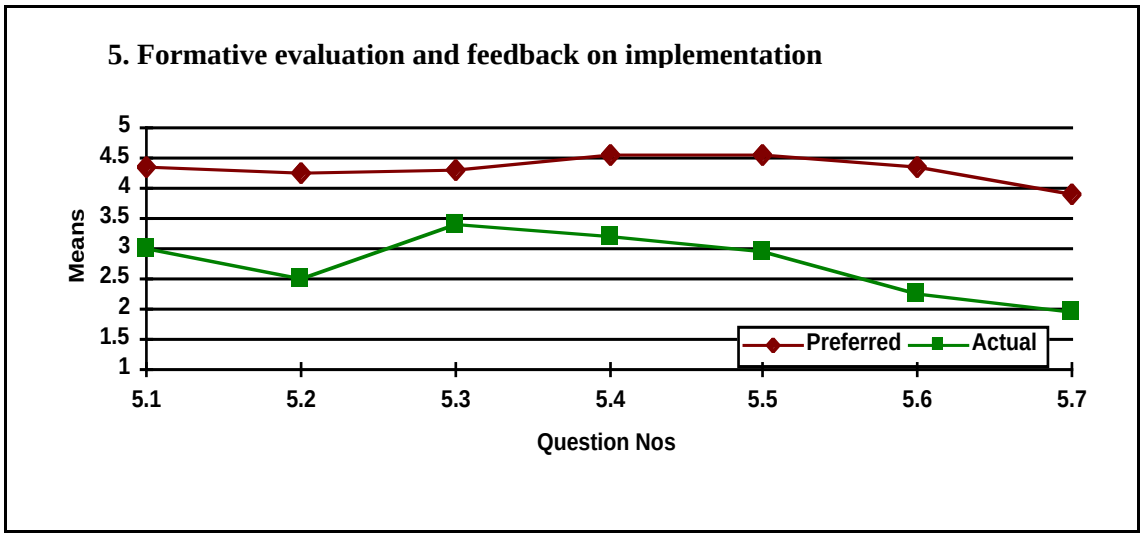
(Refer to Appendix C1 for details of the questions in each group)











As can be seen from the graphical representations, the factors were seen to have been less important in the *actual* situation than the lecturers would have *preferred* in all but one case. The one instance for which the *actual* and *preferred* lines crossed occurred for question 3.4, "How important is it that lecturers develop their own materials using the completed syllabus documents". This indicated lecturers' preference for teaching materials to be developed by some other method than the one actually practised. Respondents' comments had indicated concern at the amount of materials development which they had been expected to do in their own time. All of the alternatives in the section on resource development fared better in their preferences than that of lecturers developing new materials in their own time, and the most favoured response was that

lecturers be given time off teaching to develop materials for the development team (question 3.4).

In all other cases, the *actual* situation did not measure up to the ideal. Some of the differences between the various factors were greater than others, and these then were looked at in more detail by way of a series of statistical tests. Table 5.4 shows the results of a t test for dependent samples which was conducted separately for each item contained in the questionnaire. Table 5.4 shows that, with the exception of statement 3.4, the differences between preferred and actual scores were statistically significant ($p<0.01$) for every item.

The statistical analysis of differences between *preferred* and *actual* situations confirmed the visual interpretation. All differences between the *actual* and *preferred* were significant except for question 3.4, as discussed above. The degree of difference between each item was calculated in order to separate those where the difference was greatest from those where the difference was less. To do this, the questions were reworded in terms of statements of lecturer needs to make their meaning clear outside the context of the questionnaire (see Appendix D6 for restatement of questions as statements of need). The reworded statements are used from this point onwards in this analysis. They are referred to as statements rather than questions or items.

Table 5.5 sets out the differences in the mean scores obtained for the *preferred* and *actual* situations for each statement expressed in standard deviation units. The use of standardised scores based on the number of standard deviations provides a fairer basis than differences between raw score means when comparing *preferred* and *actual* scores for different statements. The magnitudes of difference are derived by dividing the differences between *preferred* and *actual* means by the appropriate standard deviation. Statement 3.4 has been omitted from Table 5.5.

Table 5.4 Statistical data for preferred and actual questionnaire items (N = 40)

Q No	Mean		Standard Deviation		Differences in means		
	Preferred	Actual	Preferred	Actual	Raw score	SDs	t
1.1	4.8	4.1	0.7	1.4	0.7	0.7	3.1*
1.2	4.0	3.0	1.1	1.4	1.0	0.3	3.4*
1.3	4.4	3.2	1.0	1.5	1.2	0.5	5.0*
1.4	4.4	3.0	1.0	1.5	1.3	0.5	5.6*
1.5	3.8	2.5	1.1	1.3	1.4	0.2	5.4*
1.6	4.0	2.8	1.1	1.4	1.2	0.3	5.6*
1.7	3.8	2.3	1.1	1.3	1.5	0.2	6.3*
1.8	4.0	2.6	1.3	1.5	1.5	0.2	6.0*
1.9	4.2	2.7	1.1	1.5	1.6	0.4	6.0*
1.10	4.5	3.2	0.7	1.5	1.3	0.8	5.5*
1.11	4.7	3.6	0.6	1.4	1.1	0.8	4.6*
1.12	4.8	3.8	0.5	1.4	1.0	0.9	4.2*
1.13	3.7	2.3	1.2	1.4	1.3	0.2	6.4*
1.14	4.1	2.8	1.0	1.4	1.2	0.4	5.4*
1.15	4.1	3.0	1.0	1.4	1.1	0.4	4.2*
1.16	4.3	3.3	0.9	1.4	1.0	0.5	3.8*
1.17	3.8	2.8	1.0	1.4	1.1	0.4	4.4*
1.18	4.7	4.0	0.6	1.5	0.7	0.9	2.9*
2.1	4.2	2.7	0.9	1.6	1.5	0.7	5.9*
2.2	4.2	2.5	0.7	1.5	1.7	0.8	7.0*
2.3	3.9	2.6	1.0	1.4	1.3	0.4	5.3*
2.4	3.7	2.5	1.1	1.4	1.1	0.3	4.8*
2.5	4.2	3.1	0.8	1.5	1.1	0.7	4.3*
2.6	4.2	3.1	0.9	1.5	1.1	0.6	4.5*
2.7	4.4	3.3	0.9	1.5	1.1	0.6	4.7*
2.8	3.3	2.0	1.1	1.3	1.2	0.2	6.3*
2.9	4.0	2.7	1.0	1.4	1.3	0.4	5.4*
2.10	4.3	3.3	0.7	1.5	1.0	0.8	4.0*
4.0	4.0	3.3	1.0	1.4	0.7	0.4	3.0*
3.1	4.3	2.8	0.9	1.6	1.6	0.7	5.9*
3.2	4.6	2.5	0.6	1.7	2.1	1.1	6.8*
3.3	4.0	2.2	1.3	1.4	1.8	0.1	6.2*
3.4	3.4	4.0	1.3	1.2	-.6	0.1	-2.0
3.5	4.5	3.1	0.7	1.4	1.4	0.7	6.0*
3.6	4.1	1.9	1.1	1.4	2.2	0.3	8.7*
4.1	4.3	2.7	1.0	1.7	1.6	0.7	5.6*
4.2	4.3	2.7	0.9	1.6	1.6	0.7	5.8*
4.3	4.2	2.4	1.0	1.6	1.8	0.6	6.7*
4.4	4.1	2.6	0.9	1.4	1.5	0.5	6.0*
4.5	3.7	2.4	1.2	1.5	1.2	0.3	4.9*
4.6	4.2	3.2	0.9	1.6	1.2	0.7	4.9*
4.7	4.3	2.8	1.0	1.6	1.5	0.6	5.7*
4.8	4.5	2.8	0.7	1.6	1.7	0.9	6.9*
4.9	4.5	2.8	0.7	1.5	1.7	0.8	6.9*
4.10	4.3	2.0	0.9	1.1	2.3	0.2	10.3*
4.11	4.3	2.5	1.0	1.7	1.8	0.7	6.5*
5.1	4.3	2.9	0.8	1.7	1.4	0.9	5.1*
5.2	4.3	2.5	0.8	1.6	1.8	0.8	4.9*
5.3	4.9	3.4	0.8	1.6	0.9	0.8	3.5*
5.4	4.5	3.2	0.8	1.5	1.3	0.7	5.1*
5.5	4.5	2.9	0.8	1.4	1.5	0.6	5.9*
5.6	4.4	2.2	0.7	1.3	2.2	0.6	8.6*
5.7	3.9	2.0	1.0	1.3	1.9	0.3	7.7*

*** p< 0.01**

Table 5.5 Degree of difference between preferred and actual statements expressed in standard deviation units *(N = 40)*

Qu No	Statement	Difference in SDs
1.1	Information on a major curriculum innovation about to begin in study area	0.7
1.2	Information on minor revision being planned in their study area	0.3
1.3	Information on any revisions being planned in their *subject*	0.5
1.4	Information on who the Project leader is	0.5
1.5	Information on who the Curriculum Officer is	0.2
1.6	Information on which senior TAFE staff are involved	0.3
1.7	Information on who the industry representatives are	0.2
1.8	Information on what sort of needs analysis was done	0.2
1.9	Information on the results of the needs analysis	0.4
1.10	Information on design decisions (shape and structure of the course)	0.8
1.11	Information on changes in content planned for the new course	0.8
1.12	Information on educational changes planned for course	0.9
1.13	Information on the completed SESDA accreditation documents	0.2
1.14	Information on who is developing the subject syllabuses	0.4
1.15	Information on who is developing other resources	0.4
1.16	Information on plans for new equipment and materials	0.5
1.17	Information on plans for staffing, student market, funding etc	0.4
1.18	Information on when the new course is planned to begin	0.9
2.1	Involvement in the needs analysis	0.7
2.2	Involvement in comment on the results of a needs analysis	0.8
2.3	Communication with industry representatives involved in curriculum development	0.4
2.4	Communication with the development team on industry related matters	0.3
2.5	Communication with Project leader to express interest in the project	0.7
2.6	Participation in decision making about the design of the course	0.6
2.7	Participation in decision making about learning outcomes of the course	0.6
2.8	Participation in discussion of SESDA accreditation documents and giving input	0.2
2.9	Participation in syllabus writing (especially competencies)	0.4
2.10	Participation in discussion of completed syllabus documents and giving input	0.8
2.11	Voluntary participation in resource development	0.4
3.1	Information on the curriculum team's plans for developing resources and teaching materials	0.7
3.2	Time off teaching given to develop teaching materials for the team	1.1
3.3	Nomination of someone from study area to develop teaching materials	0.1
3.5	Opportunities to see and discuss other people's teaching materials	0.7
3.6	Common resource materials to be developed with TESC or Joondalup	0.3
4.1	Information in writing of all major decisions throughout development	0.7
4.2	Staff development meetings be held throughout to discuss the major decisions	0.7
4.3	Staff development meetings to change the curriculum documents before accreditation	0.6
4.4	Staff development meetings be held after accreditation to discuss new documents	0.5
4.5	Staff development meetings to change the syllabus documents after accreditation	0.3
4.6	Staff development meetings devise an implementation plan	0.7
4.7	Staff development meetings be devoted to any new content (knowledge)	0.6

4.8	Staff development meetings be devoted to any new skills development	0.9
4.9	Some staff development meetings to include the members of the development team	0.8
4.10	Some staff development meetings include industry representatives on team	0.2
4.11	The minutes of staff development meetings be made available to all implementers	0.7
5.1	Participation in feedback by collecting feedback from students	0.9
5.2	Participation in feedback from employers of students	0.8
5.3	Participation in feedback on their own experiences and opinions about teaching the course	0.8
5.4	Staff development meetings to share and discuss data	0.7
5.5	Staff development meetings with senior staff to give feedback	0.6
5.6	Staff development meeting with the curriculum team to give feedback	0.6
5.7	Staff development meeting with industry representatives to give feedback	0.3

Table 5.6 ranks the statements in order of the degree of difference between the *preferred* and *actual* situations expressed in standard deviation units, with the greater differences first. Also, the statements in Table 5.6 have been divided into eight bands (level 1 to level 8) representing the size of the differences between *preferred* and *actual* ratings.

Table 5.6 Ranked differences between preferred and actual items

Level	Diffs in SDs	Statement
1	1.1	Time off teaching given to develop teaching materials for the team
	0.9	Information on educational changes planned for course
	0.9	Information on when the new course is planned to begin
	0.9	Staff development meetings be devoted to any new skills development
	0.9	Participation in feedback by collecting feedback from students
2	0.8	Information on design decisions (shape and structure of the course)
	0.8	Information on changes in content planned for the new course
	0.8	Involvement in comment on the results of a needs analysis
	0.8	Participation in discussion of completed syllabus documents and giving input
	0.8	Some staff development meetings to include the members of the development team
	0.8	Participation in feedback from employers of students
	0.8	Participation in feedback on their own experiences and opinions about teaching the course
3	0.7	Information on a major curriculum innovation about to begin in study area
	0.7	Involvement in the needs analysis
	0.7	Communication with Project leader to express interest in the project
	0.7	Information on the curriculum team's plans for developing resources and teaching materials
	0.7	Opportunities to see and discuss other people's teaching materials
	0.7	Information in writing of all major decisions throughout development
	0.7	Staff development meetings be held throughout to discuss the major decisions
	0.7	Staff development meetings devise an implementation plan
	0.7	Availability of minutes of curriculum development meetings to all implementers
		Staff development meetings to share and discuss data

Level	Diffs in SDs	Statement
4	0.6	Participation in decision making about the design of the course
	0.6	Participation in decision making about learning outcomes of the course
	0.6	Staff development meetings to change the curriculum documents before accreditation
	0.6	Staff development meetings be devoted to any new content (knowledge)
	0.6	Staff development meetings with senior staff to give feedback
	0.6	Staff development meeting with the curriculum team to give feedback
5	0.5	Information on any revisions being planned in their *subject*
	0.5	Information on who the Project leader is
	0.5	Information on plans for new equipment and materials
	0.5	Staff development meetings be held after accreditation to discuss new documents
6	0.4	Information on the results of the needs analysis
	0.4	Information on who is developing the subject syllabuses
	0.4	Information on who is developing other resources
	0.4	Information on plans for staffing, student market, funding etc
	0.4	Communication with industry representatives involved in curriculum development
	0.4	Participate in syllabus writing (especially competencies)
	0.4	Voluntary participation in resource development
7	0.3	Information on minor revision being planned in their study area
	0.3	Information on which senior TAFE staff are involved
	0.3	Communication with the development team on industry related matters
	0.3	Common resource materials to be developed with TESC or Joondalup
	0.3	Staff development meetings to change the syllabus documents after accreditation
	0.3	Staff development meeting with industry representatives to give feedback
	0.2	Information on who the Curriculum Officer is
	0.2	Information on who the industry representatives are
	0.2	Information on what sort of needs analysis was done
	0.2	Information on the completed SESDA accreditation documents
	0.2	Participation in discussion of SESDA accreditation documents and giving input
	0.2	Some staff development meetings include industry representatives on team
8	0.1	Nomination of someone from study area to develop teaching materials
	0.1	Development of own materials using completed syllabus documents

The statements with the greatest *actual-preferred* difference (ie, Level 1 statements) included being given time off teaching to develop teaching materials, information giving, skills development and, interestingly, being able to give feedback from their students to someone who could make changes. This suggested a strong deficiency in the availability of ongoing support during implementation.

In the second highest group of differences (Level 2 statements in Table 5.6) were statements regarding early involvement in decision making and, again, a deficiency in provision for ongoing support during implementation.

Levels 3 and 4, for which the differences between *preferred* and *actual* scores were not as great, but still important, include the statements of early information and involvement in decision making and continuing communication through staff development meetings. These differences indicate that a preference for lecturer ownership which was not being met.

Differences at the lower end of the ranking, Levels 5 and 6, indicate either that the differences were not as great, or that the respondents didn't consider them as important in the ideal situation. A comparison of Tables 5.6 and 5.7 suggests the latter. However, there are some surprising features in the data from these Levels. Why should "information on any revisions being planned in their subject" rank so much lower in the difference Levels than "information on a major curriculum innovation about to begin in study area"?

For the levels of smallest differences (Levels 7 and 8), a comparison with Table 5.7 again indicates that the statements are not regarded as important in the ideal situation, and therefore the differences are not as consequential as they might seem. The final statement, "development of own materials using completed syllabus documents", is the one for which differences between *preferred* and *actual* scores were statistically non-significant.

Ranking the preferred factors by level of importance

The second part of the analysis concentrated on the ideal situation, as identified by the lecturers in the first, or *preferred* situation, part of the questionnaire. The data for this were based on the same 40 responses used above. Mean raw scores for the *preferred* situation were used.

Using the descriptive categories described in Chapter 3, the *preferred* factors were classified into levels of importance in Table 5.7. The categorisation is itself of significance to curriculum officers or change agents planning successful dissemination

of new products. Future models or strategies of dissemination need to pay attention to these findings and could use Table 5.7 as a checklist of the factors which could be included. It is used here to isolate the factors needed to build the dissemination model for the next part of this research. Refer to Table 3.4 and Appendix D7 for the details on which this table is based.

Table 5.7 Preferred statements ranked by level of importance

Rank	Statement
	Essential
1	Information on educational changes planned for course
2	Information on a major curriculum innovation about to begin in study area
3	Information on changes in content planned for the new course
4	Information on when the new course is planned to begin
5	Time off teaching given to develop teaching materials for the team
6	Staff development meetings with senior staff to give feedback
7	Staff development meetings to share and discuss data
8	Information on design decisions (shape and structure of the course)
9	Staff development meetings be devoted to any new skills development
10	Opportunities to see and discuss other people's teaching materials
	Important
11	Some staff development meetings to include the members of the development team
12	Information on any revisions being planned in their *subject*
13	Participation in decision making about learning outcomes of the course
14	Staff development meeting with the curriculum team to give feedback
15	Information on who the Project leader is
16	Information on plans for new equipment and materials
17	The minutes of staff development meetings be made available to all implementers
18	Participation in feedback by collecting feedback from students
19	Participation in discussion of completed syllabus documents and giving input
20	Information on the curriculum team’s plans for developing resources and teaching materials
21	Information in writing of all major decisions throughout development
22	Participation in feedback on their own experiences and opinions about teaching the course
23	Staff development meetings be devoted to any new content (knowledge)
	Useful
24	staff development meetings be held throughout to discuss the major decisions
25	some staff development meetings include industry representatives on team
26	participation in feedback from employers of students
27	staff development meetings to change the curriculum documents before accreditation
28	staff development meetings devise an implementation plan
29	involvement in comment on the results of a needs analysis
30	information on the results of the needs analysis
31	participation in decision making about the design of the course
32	involvement in the needs analysis
33	communication with Project leader to express interest in the project
34	staff development meetings be held after accreditation to discuss new documents

	Of limited use
35	information on who is developing the subject syllabuses
36	information on who is developing other resources
37	common resource materials to be developed with TESC or Joondalup
38	participation in syllabus writing (especially competencies)
39	information on what sort of needs analysis was done
40	information on which senior TAFE staff are involved
	Not necessary
41	nomination of someone from study area to develop teaching materials
42	information on minor revision being planned in their study area
43	voluntary participation in resource development
44	communication with industry representatives involved in curriculum development
45	staff development meeting with industry representatives to give feedback
46	information on who the Curriculum Officer is
47	information on plans for staffing, student market, funding etc
48	information on who the industry representatives are
49	information on the completed SESDA accreditation documents
50	communication with the development team on industry related matters
51	staff development meetings to change the syllabus documents after accreditation
52	development of own materials using completed syllabus documents
53	participation in discussion of SESDA accreditation documents and giving input

There are 10 statements designated as *essential* in Table 5.7 according to item means obtained for the *preferred* situation, and they mark the areas of greatest concern for lecturers having to cope with innovation. Unlike some lecturers in the pilot study, the majority of survey respondents were not strongly concerned with knowing what was in the needs analysis nor with communicating directly with industry representatives.

However, respondents believed that it is essential to know in advance when major curriculum development is to begin in their study area, any changes planned in course structure, or any educational changes such as new methods, alternative delivery strategies, entry and exit points, competency-based learning outcomes or self pacing. They need to know when the course is planned to begin. They want inservice development related to any new skills needed in teaching the new course, and staff meetings to share and discuss course ideas and to give feedback on the innovation to senior staff. Finally, they need to be given time off teaching to develop resources and teaching materials for the team, and to see and discuss other people's teaching materials. These are the essential ingredients for lecturers coping with change, and they should be built into any future model for managing curricular innovation.

Thirteen *preferred* factors are labelled as *important.* Lecturers do not consider it important to be involved in the *actual* development of the innovation, but they would like to be kept informed in writing about what is going on. They would like to know who the project leader is, to meet members of the development team to discuss the new course and give input and to have a voice in decision making about learning outcomes. They would like a series of staff development meetings to inform them of revisions specific to their subject areas, and new content to be introduced. They need to be reassured that plans for new equipment and materials are being attended to. They would like to discuss the completed documents with the development team from a teaching perspective. They consider it important to be involved in a two-way information sharing process with the development team, and for communication channels to be in place to give input on their experiences and opinions about teaching the course and on feedback from students once implementation begins. Also, they would like a written record of staff development meetings, in case they miss anything.

The answers to the first two groups of statements indicate a high level of professional interest in being involved in the process of change, and that lecturers desire to give input throughout the course design and development, production of materials and implementation stages of curriculum innovation. The desire to collect implementation data, presumably as a formal process, and pass it on to senior staff indicates that lecturers do not see the change process as finishing when implementation starts, but continues with ongoing improvement and fine tuning. For this, there needs to be some mechanism, and some senior member of staff in a position of responsibility to receive lecturer input and act on it.

Less important to the process, but still of interest to a number of lecturers, are the next group of 11 factors, which are classified here as *useful*. Some lecturers are interested in being involved more intimately in the development stage, to be in touch with the project leader, to give input to any needs analysis, to see the results of the needs analysis done and to have the opportunity to comment on it, and to participate in the design of the course. They would like staff meetings throughout the development process to

discuss the major decisions and would like to discuss the course with the official industry representatives on the team. They would like staff development meetings to be able to bring about change to curriculum details before accreditation, and to discuss them again after accreditation. These lecturers also would like to see a formal implementation plan in place and, during implementation, they would like to collect feedback from employers of students and channel it back to someone who has the power to continue to make modifications.

This smaller group of lecturers are those wanting to keep a closer eye on industry input. This backs up one of the findings from the pilot study, namely, that lecturers sometimes mistrust the messages which they receive from occupational or needs analysis and the input from the Industry Employment and Training Councils (IETCs). There is evidence in this group of answers of a small number of lecturers interested in curriculum development and wanting to put their interest into practice, while the majority classified the statements as less important than *useful*.

The fourth group of six factors are categorised as *of limited use* (Table 5.7), and indicate that some lecturers wish to be involved in the design of the course and syllabus writing, especially competencies (if they themselves are competent to do so, as one respondent added). If they are not involved in developing syllabuses, resources and teaching materials, they at least would like to know who is and, in particular, which senior staff are involved. A number of respondents was confused about the possibility of shared resources developed in common with TAFE External Studies College or the Joondalup campus flexible delivery (open learning) project team, and it is likely that the most positive answers concerning this factor came from lecturers from those two institutions, who knew more about the significance of alternative delivery.

Categorised as *not necessary* (Table 5.7), the last 13 factors deal with knowledge of and participation on a wider level with Curriculum Services, Staff development,

administration, industry and the State Employment Skills Development Authority (SESDA), etc. The least important factor listed was that lecturers develop their own resources and teaching materials, in their own time, using the completed syllabus documents, and this was the only factor for which the *preferred* and *actual* lines crossed in the graphs (Figure 5.1). Having to develop their own resources without time, funding or guidance was one of the major frustrations identified in the survey, and it is no surprise that it was ranked as the least important factor for success.

Discussion on survey findings

There can be no doubt about the views of TAFE lecturers concerning the dissemination factors affecting curriculum innovation. The personal and innovation data, the open-ended comments and the *preferred* and *actual* situation data each confirm the existence of serious dissemination problems. The change process in almost every case was identified as difficult, lacking in reasonable support structures and causing stress, confusion and cynicism amongst the lecturers. This needs to be seen alongside the lecturers' high level of belief in the need for curriculum change and the enthusiasm which some indicated about new curricular ideas.

The personal and innovation data indicated a well-experienced group of lecturers who believed in what they were doing, but who saw the change as unnecessarily difficult for them as busy and dedicated teachers. The majority claimed to have been given insufficient personal support, funding, time allocation or resources. Some also mentioned the lack of staff development and skills training.

Comments concerning dissemination were overwhelmingly negative. It is not difficult to deduce that there were too many problems identified in too many projects for the situation to be seen as healthy. Staff were expected to assume too much of the responsibility for coping with new courses and new ideas without preparation and before they had developed any sense of ownership. If involving lecturers in developing

their own teaching materials was considered to be a method of increasing user participation in the change process, it certainly wasn't working.

The analysis of the *preferred* and *actual* questionnaire responses indicated a consistent gap between the ideal and the *actual* situation on every one of the factors except one (that of developing their own materials) and that was the factor about which lecturers were most disgruntled. The space between the *preferred* and *actual* lines on all the graphs, and the statistically significant differences in *preferred* and *actual* item scores, represent a less than desirable balance between the *preferred* and the *actual* situations.

From further analysis of the *preferred* situation, a ranking of factors considered important to the users was obtained. All but 13 factors were ranked in importance above 4 on a 5-point scale (mean raw scores), and those 13 factors were ranked above 3.35. In short, all dissemination factors listed were of considered important to staff involved in curriculum implementation.

Conclusion

The aims of this stage of the research were to administer a questionnaire survey to ascertain lecturers' views about current dissemination practices in TAFE, to determine which factors they considered most important and to identify the areas of dissemination practice which need improvement.

The chapter analysed three sets of data collected via the questionnaire survey: the personal and innovation data from p.7 of the questionnaire; the open ended comments from pp.3 and 6 of the questionnaire; and the comparison of *preferred* and *actual* situations from the main section of the questionnaire (see Appendix C1 for questionnaire). The findings consistently pointed to the need for improvement in the dissemination tactics used in curriculum innovation.

The results of the survey shed important light on the second of the research statements defined in Chapter 1: *Which factors are important in ensuring effective curriculum dissemination in TAFE?*

Using the issues which concern the users discussed in Chapter 4, and the factors considered important for effective curriculum dissemination set out in the present chapter, a model strategy for curriculum dissemination was devised and was applied to a curriculum innovation as the third and final stage of this research. This is reported in Chapter 6.

Chapter 6

The dissemination strategy

In order to feel a sense of control, [teachers] have to recognize what it is ... that they want to change. It is not easy, however, to help teachers to arrive at such complex understandings.
(Rudduck, 1991, p.92)

This chapter is concerned with the third stage of the research design referred to in Figure 3.1. It follows through the task of building a model dissemination strategy based on, first, the exploration of dissemination issues concerning TAFE lecturers in the pilot study (Stage 1), second, the identification of specific dissemination factors during the questionnaire survey (Stage 2) and, third, the application and observation of a series of dissemination tactics used with a new curriculum project (Stage 3).

Chapter 3 described the development of a strategy for application in the field as a collaborative dissemination model. The dissemination strategy aimed to provide lecturers with information, involvement and support, to remove as many of the identified constraints as possible and to encourage lecturer participation and ownership, to involve them in the study of their own practice and to break down feelings of alienation and resistance. This was to be done through a series of *normative / re-educative* tactics (Bennis *et al.*, 1976), including the distribution of curriculum materials, meetings, Newsletters, the setting up of a network, questionnaires and the development of teaching materials. The researcher was to work with the Study Area Leader and involve as many lecturers as possible at as deep a level of involvement as possible. It was noted in Chapter 3 that this part of the research was not intended to use participant observation methods, but that the nature of the research environment made this approach unavoidable.

This chapter attempts to answer the third research question defined in Chapter 1: *Based on the factors identified, can an effective strategy be devised for curriculum dissemination in the TAFE context?*

Objectives of the planned dissemination strategy

The findings from the questionnaire survey (see Chapter 5) indicated that, on the whole, TAFE lecturers were in favour of updating curricula in line with industry and Government requirements, even though they were not at ease with the way in which innovations were introduced. In spite of "the tenacious conservatism of institutions" (Rudduck, 1991, p.28), the lecturers saw themselves in step with industry and government demand for reform. However, it is likely that most of them weren't as ready for change as they believed they were (see Rudduck 1991, p.28). That had not been an issue of the research to this point. The questionnaire survey had examined lecturers' reactions to the shortcomings of the formal, centrally controlled dissemination process and identified how it might be improved. One of the most important needs defined in the literature and confirmed in both the pilot study and the questionnaire survey, however, was that the change process must become more sensitive to the culture and personal meaning of the lecturers, to their readiness for change and to their need for involvement and ownership. The strategy discussed in this chapter deals also with these matters.

The planned dissemination strategy set out to achieve three things:

1. *To provide lecturers with information, involvement and support with as many of the essential and important factors possible from the list identified from the survey.* Eleven of the 23 *essential* and *important* needs statements set out in Table 5.7 in the previous chapter are concerned with receiving information. Six indicate lecturers' need to discuss features of the innovation at staff development meetings, two are concerned with the development of teaching materials, and the other four are concerned with ongoing input and feedback into further development of the materials. The strategy attempted to meet these four groups of needs.

2. *To remove as many of the identified constraints as possible and to work as comfortably as possible within those which cannot be removed.* Among the

constraints identified in Chapter 3 are those concerned with lack of time, money, resources and leadership to facilitate change. They include lecturer resistance, alienation and low morale, lack of commitment from senior staff, poor communication channels, insufficient development time and unreal expectations from industry. The strategy proposed concentrates on finding funds, increasing leadership effectiveness and raising staff morale in the face of change. The timing was such that the dissemination project would be in place well before the implementation began. The researcher's time and assistance as 'coach', also, was offered free to the project.

3. *To set up tactics to encourage lecturer participation and ownership, to involve them in the study of their own practice, and to break down feelings of alienation and resistance.* The third set of factors was derived from the first two sets above and from the research literature on change. It involved setting up a change environment based on collaboration, involvement, commonality of purpose, open communication and trust, awareness raising, group identity and, at the end of it all, a sense that something had been achieved. This was the hardest part of the strategy, in that it meant responding to unexpected twists in direction as problems arose. It required constant effort to open communication channels and keep them open in the face of the insoluble constraints of time and distance. It required fostering a sense of excitement and commitment among the lecturers, and nurturing and encouraging these for as long as it took for the project to become self generating.

How the proposed dissemination strategy relates to the selected curriculum project is discussed in the next two sections. The section on *The Certificate of Horticultural Skills* sets the physical and structural scene for the strategy, and *The human parameters of the dissemination strategy* describes some of the human variables within which the strategy was implemented.

The Certificate of Horticultural Skills

The new curriculum project selected for testing the strategy was the Certificate of Horticultural Skills, a 281-hour course in basic horticultural skills training, with a Year 10 entry level. It consisted of eight core subjects covering 230 hours, and one 51-hour elective to be chosen from three fieldwork options. The two major educational changes to be introduced by the new course were as follows:

Level

The award was pitched at Australian Standards Framework (ASF) level 2 ("able to perform proceduralised tasks under general supervision, at a level corresponding to competent operative to advanced operative"), and was a basic vocational training course for school leavers or unskilled adults. This was not a change in TAFE policy or content, but a change for lecturers previously involved in teaching apprenticeship (ASF level 3), Advanced Certificate (ASF level 4) and Associate Diploma (ASF level 5) courses. (For a full definition of ASF levels, refer to Appendix E1.)

Competency-based learning and assessment

The course was set out as a series of observable learning outcomes and assessment criteria based on those outcomes. This formal commitment to competency-based learning and assessment was new in the teaching of horticultural subjects. It was also among the first fully competency-based courses to be accredited in Western Australia.

The course had been drawn up by an Agricultural and Pastoral Industry Employment and Training Council (IETC) Skills Formation Advisory Panel. As a tripartite committee, the Advisory Panel officially included nominees from the employer, employee and training bodies. The horticulture industry (the employer body) was represented by two persons, one from Turf management and the other from a small Nursery business. One of these also did some part-time teaching in a government training scheme for unemployed youth with *Skillshare*. Employees were represented

by an officer from the Miscellaneous Workers Union. The training body was the Department of Training, and its nominee was an officer from Curriculum Services. The horticulture Study Area Leader attended some of the meetings as an observer. The composition of such a small committee can mean, as it did in this case, that one industry representative can have an inordinate amount of decision making power. It also meant that the curriculum was drawn up with minimal interaction with or participation of horticulture lecturers. In line with the new Federal Government directives, the curriculum was very much industry driven.

Two horticulture lecturers were contracted to develop the course structure and to write the learning outcomes, the assessment criteria, conditions and assessment methods, as required by the Australian Committee for Training Curriculum (ACTRAC) guidelines. Early drafts had been circulated to a limited number of subject lecturers for comment and feedback. The course outline then was debated and modified by the representatives of the Advisory Panel. A number of changes was made to the document by the Advisory Panel, before the final version was approved by the Advisory Panel for accreditation by the Skills Standards and Accreditation Board (SSAB). Neither the original writers nor the subject lecturers saw the changes which had been made until after the syllabus had been accredited and published.

The horticulture study area comprises approximately 50 full-time and a variable number of part-time lecturers, spread throughout three metropolitan college campuses, six regional colleges and a number of rural TAFE centres and campuses. There are also horticultural courses run in the three large non-TAFE rural community colleges, and in a number of Aboriginal communities. The course was due to run on an undetermined number of sites the following year. A pilot course had begun before accreditation at Murdoch, a metropolitan TAFE campus, and Midlands Regional College joined the pilot in the second semester.

A map of TAFE colleges and centres where horticulture is offered is shown in Figure 6.1 and emphasises the significance of distance as a constraint on dissemination practice.

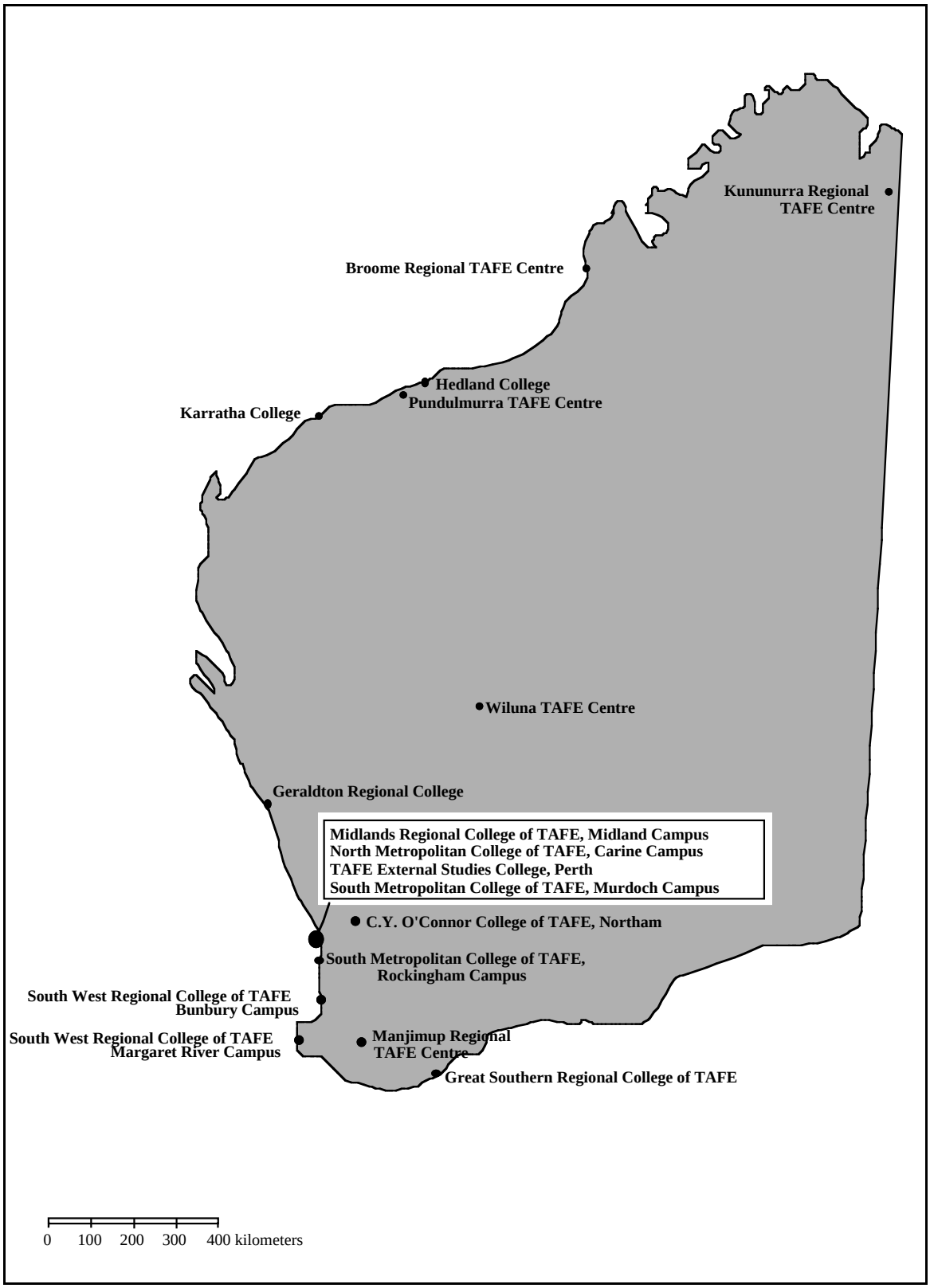
The human parameters of the dissemination strategy

The project had strong support from the Manager and staff of Curriculum Services and one of the Directors of the Department of Training. It is doubtful whether the project would have been viable without this backing. One of the first important features of the project was the allocation of a small development grant by the Director, through Curriculum Services. It was not realised immediately how important this would turn out to be.

The Study Area Leader was consulted about the proposed project, and appeared to be enthusiastic. At the researcher's request, the Study Area Leader called two project meetings, or workshops, which were set up as a central coordination mechanism for the project. He remarked that it was a close knit study area, that there were frequent meetings anyhow, and that two meetings were likely to be enough. He agreed to find out where the course would be running the following year and to provide the addresses of all horticulture lecturers in the State for the distribution of syllabuses, Newsletters, questionnaires and other mailings.

The agenda for the first project meeting was distributed as widely as possible, and funding was offered to cover travel and staff release time. The Study Area Leader telephoned senior lecturers and coordinators throughout the State seeking confirmation about where the new course was planned to run either this year (the pilot) or next (implementation). A number of campuses and TAFE centres expressed interest, and had submitted 'profiles' for funding, but were awaiting notification and were not happy about committing staff to time release to attend the meetings. A week before the first project meeting, the Study Area Leader announced that only six lecturers

Figure 6.1 Sites of horticulture departments throughout Western Australia



would be attending, and most of these were from the Murdoch metropolitan campus where the pilot course had been running.

In dismay at this news, the researcher telephoned senior lecturers in several colleges to see whether they had heard about the meeting, and whether they knew that funding was available to send staff. One explained that, with very small staff numbers, and some teaching block release classes (two weeks' concentrated teaching once a year for rural apprentices), it virtually was impossible to find relieving teachers to take over classes. Furthermore, he was not sure whether they would be joining the pilot course this year, or delaying implementation until 1995, and he didn't know yet who would be involved in it. Another gave a similar response, adding that the distance was too great to make the trip worth his while. These responses, and the total absence of rural representation at the first project meeting, indicated that the dissemination project was assuming a shape and identity of its own, and being forced into existing patterns familiar to the study area. If the project were to achieve what it had set out to do, greater attention would need to be given to other features of the strategy to overcome the deficiencies already apparent in the attendance at the first project meeting. Recognising and facing the constraints in the field was proving quite different from listing them on paper in the Curriculum Services office.

There was already evidence of personal conflict within the study area. The Study Area Leader had been appointed at the beginning of the year, and there was some doubt in some quarters about his ability to do the new job. Two joint acting Study Area Leaders had replaced a previous Study Area Leader when he had gone on leave the year before. Consequently there were at least three people who felt that they knew the job better than the new incumbent. There was also friction between two senior lecturers in the largest horticulture department, and it was not obvious how this might manifest itself. Discontent was expressed also about the Associate Director (Academic) and the curriculum officer, whose portfolios included the horticulture Study Area, and who were seen to have control of curriculum reform processes. Neither were

horticulturalists, and they generally were considered to belong to ‘the other side’, which was making them do things they didn’t necessarily believe in.

On the other hand, the study area consisted of a close group of lecturers, who knew everybody else, and a tradition of frequent meetings had consolidated their sense of identity. There was very much a sense of ‘them’ and ‘us’, as they struggled with the directives of the new curriculum, and questioned the fundamental nature of competency-based training, which they felt had been foisted on them by bureaucrats and industry people who didn’t understand the requirements of teaching as well as they did.

These factors were part of the culture, or human face, of the group, and they affected the process of putting the collaborative strategy in place.

The four most distinctive tactics of the dissemination strategy were the meetings, the Newsletters, the questionnaires, and the network. These are discussed in detail in the next four sections of this chapter. These tactics are claimed to be *normative / re-educative,* according to the definitions derived by Bennis *et al.* (1976). Using Marsh’s (1992) categories, the meetings could be described as ‘personal demonstration’ tactics, the Newsletters as ‘impersonal information’ and the questionnaires and network as ‘interpersonal field agents’.

Two other tactics are listed in Chapter 3 as part of the strategy, namely, the distribution of curriculum materials and materials development. These were put into place as part of the strategy, and are referred to in the next four sections. They were important, but do not warrant separate headings and discussion. A seventh tactic eventually developed as part of the dissemination strategy and that was face-to-face contact with rural lecturers. The need for this as a separate tactic arose during the life of the project and was not put into place until after the formal research period had finished. It is referred to later, not under a separate heading, but as part of the analysis of variables of the dissemination strategy.

The meetings

The first project meeting

Five of the lecturers who attended the first meeting had been involved in the pilot course at Murdoch campus and the sixth was from the TAFE External Studies College. Two of them had played a large part in writing the initial curriculum document and others had read and commented on draft subjects. Thus, all were involved already in the course and had a certain degree of ownership. The participants included one of the horticulture senior lecturers and the Study Area Leader, both from Murdoch campus and both familiar with the pilot course. The competency-based coordinator from the TAFE Professional and Career Development Unit also attended the meeting. Two other lecturers who had been part of the pilot course were unable to attend. From the outset, it looked as though the project and staff development part of the strategy was not reaching the right people, and that there was a large number of potential implementers who were not being involved in the discussions. However, one of the first things that the researcher had to realise was that the project could not dominate, but had to fit in with, the existing culture. This was an example of the constraints at work. Appendix E2 includes the agenda for this meeting.

The majority at the meeting had seen the new syllabus document, although they had read only their own subject syllabuses thoroughly. Not surprisingly, the content of the new course was assumed and, apart from a few learning outcomes which some lecturers considered irrelevant, the subject matter was not an issue. They discussed the innovative aspects of the course and shared some of their experiences in interpreting the assessment of learning outcomes. Assessment of learning outcomes was regarded as the most difficult part of the new course, and they agreed that this should be the main feature of the next (second) Newsletter. A standardised form for setting out teaching and assessment strategies was circulated and accepted. They agreed to begin writing their teaching notes on the new forms for the next meeting. They also discussed the

need for a State-wide system of assessment record keeping, and agreed to bring examples of their different recording systems to the next meeting.

The lecturers at the meeting quickly saw themselves in leadership or advocacy roles. The Murdoch participants claimed that, as they were the largest staff group in the horticulture study area, they frequently developed teaching materials and distributed them to other sites. Also, as they were running the pilot course, they assumed they would do the same again. Further questioning revealed that this never had been a systematic exercise and that the development and distribution of materials had been irregular and *ad hoc*, and certainly not a coordinated and routine practice on which to build a successful dissemination strategy.

It was assumed too easily that this group was going to make all the decisions and do the work and that they were going to 'disseminate' their work to other sites. It did not arise that this 'dissemination' was not going to happen by itself, but that someone needed to take responsibility for planning it and making sure it was systematic and complete. An awareness of the problems and demands of the dissemination of teaching materials was not existent among participants at this meeting.

The researcher stressed the importance of the involvement of all lecturers who would be teaching the course. The meeting discussed the network concept proposed in the strategy and appeared to accept it as meritorious. However, it looked as if this was not going to happen easily nor without strong encouragement. Furthermore, it was becoming apparent to the researcher that two meetings were not going to be sufficient if so few were going to attend and become involved in the development of materials.

One of the lecturers mentioned, almost in passing, that a horticulture study area meeting was scheduled for the South West Regional College at Bunbury on 27 May. This was to be attended by lecturers from a number of different colleges and TAFE centres. By this time, it was apparent that, if wider involvement and ownership were to

be encouraged through collaborative development, larger numbers of lecturers had to be involved in the dissemination project, and the concept of 'networking' more forcefully advocated. The researcher requested, and was granted, a slot on the agenda at the Bunbury meeting.

The Bunbury study area meeting

The study area meeting at Bunbury was not part of the original plan, but it turned out to be particularly advantageous in advertising the project and obtaining wider understanding and acceptance of its objectives.

The meeting attracted 12 lecturers from six colleges and TAFE centres, with two more lecturers from a rural college joining the meeting via video conferencing. There were also two teachers from a rural Agricultural High School, who were hoping to introduce the new course and prepare their pupils to articulate into TAFE at an appropriately higher level when they left school. It was a larger and geographically more widely spread gathering than the first dissemination project meeting and proved to be a vigorous and lively group.

While the researcher was given a half-hour slot at the beginning of the day to talk about the new course and the dissemination project (see Appendix E2 for the agenda of this meeting), the meeting in fact kept returning throughout the day to the issues dealt with in this research. These issues centred around the role of the teacher in competency-based training, assessment and recording of competencies, as well as articulation with existing courses. The network concept also was discussed frequently as a background issue.

Competency-based training was very much on their minds, and there was uncertainty about what the new federal reforms expected of them in terms of teaching and assessment. Late in the day, the point was accepted eventually that the accredited documents were not the same thing as curriculum materials for teaching. Lecturers were to use their teaching training and experience to interpret the learning outcomes

in the syllabus in a way that made sense to themselves. Wilson (1993) and Fullan (1991) had made this point, but it was difficult for the horticulture lecturers to come to grips with it and to discover that they themselves had an important role to play in the change.

The assessment of competency-based learning outcomes was debated with some fervour during the afternoon. A significant change in TAFE's thinking on this matter was occurring, mainly as the result of the disaster-ridden introduction of the National Metals projects two or three years before. Some of the lecturers still were thinking in the old mould of the need for painstaking assessment and recording of every single assessment criterion in the syllabus. Others had attended recent staff development meetings, and had been reassured that assessment should be based on the lecturer's professional judgement that the learner has attained competency in the knowledge and skills of the learning outcomes. It was suggested that this issue should be explored further in the next (third) Newsletter.

There was also much talk about articulation, as lecturers wanted to be assured that the new course would be recognised as credit towards the Trade Certificate level course. This issue had been raised in the pilot study interviews described in Chapter 4. Those lecturers wanted to be reassured that the 'planners' knew what they were doing, and that they knew the potential problems of introducing a lower level course which might not lead easily into existing Trade Certificate (apprenticeship) or Advanced Certificate level courses. One of the course writers was present and she attempted to explain 'course mapping', a technique used to separate the various ASF levels of competencies into the various levels of TAFE courses and awards. The discussion appeared to be useful to both the lecturers and the course writer in raising their awareness of a wide range of potential problems.

Networking as a theme of the meeting was reinforced by an impassioned plea from the rural community college staff, via a video conference line from Geraldton, asking to be kept informed and supplied with resources from other centres. The speaker was

repetitive in her need to know what was happening in other colleges, what the expectations of the new course were, and whether she should introduce the new course or not. Related to this, was the issue of sharing teaching materials in a way that would take some of the burden off the individual lecturer, and save time and energy in setting up the new course.

At the Bunbury meeting, representatives from six TAFE colleges and campuses announced that they would be running the new course next year. Some of them indeed had decided only that day to apply for funding. It appeared that the meeting had achieved a more significant dissemination outcome than the previous meeting.

The second project meeting

The second project meeting was held on 24 June, at the end of the week before examinations began. Horticulture lecturers from two rural campuses joined the core group from Murdoch campus, and apologies were received from people in three other centres. Two more colleges had been funded to run the new course, making a total of eight sites committed at this stage. The information-giving function of the strategy was beginning to have some effect.

There was also some pleasing feedback on staff reactions to the Newsletters (see the section on Newsletters below for details). The three issues from the Bunbury meeting had been explored in the third Newsletter, and staff discussion on these matters was reported by people at the meeting. Competency-based training was on the minds of most lecturers, even those not likely to be involved in the new course, and the Newsletter items had triggered significant interest and debate among staff who had not yet come to grips with the meaning and practice of the new approach. This was an example of diffusion at work. The meeting suggested that the competency-based training issues, particularly the teacher empowerment line of approach, should continue to feature in the next (fourth) Newsletter.

The meeting discussed the practical implications of *recognition of prior learning* (RPL), another new feature of the competency-based training agenda. They agreed that an existing Non-Standard Exemption form could continue to be used, but that a set process needed to be developed so that practice would be consistent in all colleges and campuses. Mention was made of an RPL Assessors' course offered at one of the city campuses, and that it was the aim of the Department of Training to have an RPL specialist appointed to every campus. The meeting participants were happy with this information, but again asked that something go in the next Newsletter in case staff in smaller centres were worried about it.

Discussion occurred on record-keeping procedures, on the use of percentages in student assessment, on the logistics of retesting when a student failed to achieve a learning outcome, on ideal class size, and on lecturer accountability. Suggestions were put together for developing an assessment recording package for distribution throughout the study area. The researcher agreed to put the package together.

It was a vigorous workshop meeting, with many difficult issues brought into open discussion and practical answers found. For topic after topic, they asked that the issue be raised in Newsletters and distributed to other lecturers. The Newsletters had become an important feature in the process of spreading ideas and information from the project lecturers to the rest of the State. The meeting participants appeared to assume that the Newsletters were going to be published indefinitely!

Discussion was steered to future directions. Officially, the research project was drawing to a close, but the excitement which had taken so long to appear was just beginning for the participants. They were ready to start just as the researcher had planned to finish. The future needed to involve a hand-over process, and it appeared that this needed to be more gradual than the researcher had planned.

There had been no discussion of the issue of materials development and distribution, nor the appointment of someone to collect and sort feedback from lecturers and

students to channel into the Skills Formation Advisory Panel review process. These were essential components of the strategy and had to be addressed quickly.

None of the pilot lecturers had brought their teaching notes, nor felt they had done enough to offer to other lecturers. The pilot course was due to be extended to a second college in five weeks' time, and nothing substantial as yet had come out of the first four pilot subjects. This experience would be wasted if other lecturers needed to start planning the same subjects again from scratch. The purpose of running a pilot course would have been defeated. The meeting was asked to consider what could be produced reasonably within a couple of weeks, so that some assistance would reach beginning pilot lecturers in time for them to start preparing their subjects.

A three-part plan was adopted to assist first, lecturers about to begin teaching in the pilot course, and second, those who would be teaching the course the following year.

1. The four lecturers who had taught subjects in the pilot program would write a single-page review, advice statement or summary of general strategies for their teaching subject. These would be distributed to the whole study area within three weeks. The assessment record keeping package to be developed by the researcher, would be attached.

2. The 'network' concept would be developed in that the telephone numbers of the four lecturers would be distributed and an invitation issued to lecturers entering the pilot course to feel free to telephone the original pilot lecturers, and each other, and talk about the course.

3. They would look at putting together a package of all pilot subjects near the end of the year. What the package would look like was not specified, but there was agreement that further funding would be needed to release lecturers from teaching duties to work on developing materials, or to pay them on contract.

The final issue was the appointment of a person to monitor and collect feedback. The Study Area Leader volunteered that this should be part of his responsibilities, and that he would be happy to do that.

There was a positive attitude towards the achievements of this meeting. The Study Area Leader expressed his pleasure to the researcher after the meeting, declaring how valuable this half-day workshop style of session had been, and how much important ground had been covered. The participants, at least, were coming to grips with the major problems of the new course, and were developing not only a strong sense of reflection and ownership, but a sense of responsibility towards the introduction of the new course in the State.

A further study area meeting was to be held at Midlands Regional College in August, where some of the issues from the second dissemination project meeting were to be developed further. The researcher, again, was expected to attend.

The Midlands study area meeting

Between the second project meeting (24 June) and the study area meeting at Midlands Regional College (19 August), there was some urgency to develop a specific plan for the development of teaching materials. It was not going to happen without direction, and it was not going to happen without funds. Even the four lecturers, who had done their own planning for the pilot subjects and had written brief reports for distribution, were far too busy to put in the extra hours to develop a teaching package suitable for use by other lecturers. One of them told the researcher bluntly that he would not do it without funding.

In discussion with the Manager of Curriculum Services, the researcher determined that there was still enough money in the original project fund to offer $200 per subject for development. This obviously was not a large sum, and the amount of development which could be expected was discussed privately with the Study Area Leader and the senior lecturers from the two pilot programs. Paid time had to assume that the developers already had worked in the pilot program and had done a certain amount of planning as part of their teaching. Development itself had to be limited to the production of teaching materials or a teaching package. The senior lecturers also

suggested that the funds be offered as a contract to the developers, rather than as release time from teaching.

The $200 was offered on the completion of a basic teaching package consisting of:

- timetable (number of hours, number of weeks)
- teaching notes
- projects, activities
- worksheets, exercises, games
- overhead transparencies
- assessment strategies
- list of available resources (reference books, videos, brochures, wall charts, pictures).

The plan was virtually in place before the study area meeting at Midlands, but needed to be explained and discussed with those present.

Present at the Midlands meeting were the newly-appointed acting Associate Director, who was a horticulturalist, the Study Area Leader and the new acting senior lecturer from Murdoch campus. There were also senior staff from Murdoch campus, Midlands Regional College, the TAFE External Studies College, Bunbury and Margaret River campuses, Rockingham, Geraldton and Karratha, and one lecturer each from Murdoch and Midlands. Nine centres were represented by 12 people, three of whom had not been at the previous three meetings. The number of lecturers with face-to-face involvement in the project was continuing to grow. (Refer to Tables 6.2 and 6.3.)

The meeting discussed the allocation of subjects to developers. Because there was only a choice of one or two lecturers who had taught, or were teaching, each subject, the choice was obvious in most cases. Eight subjects were scheduled for development in 1994 and two for the following year (refer to Table 6.1 for details of the development timetable). The packages were to be prepared on computer disk and submitted for formatting according to the timetable below. The intention was to have them formatted and master copies delivered to the Study Area Leader in time for distribution in December, well before the end of the TAFE teaching year.

The researcher offered to do the formatting, as this would be a final opportunity for reinforcing the network concept and giving final messages to the implementers. It also would help soften the hiatus of the researcher's withdrawal from the project, a factor which was discussed at the meeting after the departure of the researcher.

It was not the ideal plan for development. It did not allow for collaborative development teams, nor did it spread the ownership of direct involvement to those who were to use the materials during the following year. It gave the opportunity for reflective practice and control to a handful of lecturers, leaving the majority still to come to grips with the new materials when they were implemented in the following year. However, it did give the developers the official backing of the Study Area Leader and senior staff, and it did let representatives from nine different centres know more about the decision making processes of the project and what was planned. Once again, the meeting asked that the development plan be reported in the Newsletter, and that all lecturers be invited to communicate with the developers to discuss ideas and offer relevant assistance. The Agenda for this meeting appears with the other three in Appendix E2.

Table 6.1 Timetable for development of teaching packages

Subject	Due Date
Horticultural Safety	19 October
Soils and Watering	19 October
Fieldwork - Gardening	19 October
Describing and Using Plants	19 November
Machinery and Tools	19 November
Writing Skills for Work	19 November
Fieldwork — Lawn and Turf	19 November
Fieldwork — Nursery	19 November
Fieldwork — Landscaping	Next year
Fieldwork — Production Horticulture	Next year

Letters were sent to the selected developers outlining the conditions of the contract (Appendix E8). Supervision of the development of teaching packages by the researcher

continued for another three to four months after the research project itself had ceased officially, but continued to affect the eventual success of the strategy.

The Newsletters

The Newsletters served three purposes. First, they were to spread information about the new course to everybody in the study area, whether they were expecting to teach it or not. Second, they were to let lecturers know that there was a special 'dissemination project' in place, and to inform them of the activities and issues most valued by the project. Third, they were to open up the concept of the network, letting staff know who was doing what, and inviting them to talk about the new course and to get in touch by telephone if they wanted to discuss anything.

A 'hidden' purpose was to educate staff on matters like competency-based training and assessment and their roles in interpreting the changes which were being introduced into TAFE courses. It was considered that staff development would be needed for all lecturers as new competency-based horticultural courses were developed at Certificate, Advanced Certificate and Associate Diploma levels during the next couple of years. A knowledge of how things were done in the Certificate of Horticultural Skills course would pay off when the later courses were brought on stream. There was a lot of ignorance and fear about competency-based assessment, recognition of prior learning and the Australian Standards Framework. As the project team clarified their own ideas, they were anxious that other lecturers also keep up with the new terminology and concepts. As the Newsletters began to have an impact on lecturers, the project team encouraged their use specifically to increase this impact.

Researchers such as Fullan (1991) and Miles (1987) have warned of the inadequacy of trying to advertise innovation to teachers by way of brochures or letters. Marsh (1992) categorises it as a 'low cost, medium coverage, low impact, high convenience and low feedback' tactic (p.144). With the amount of paper passing over the average lecturer's desk each day, much is relegated promptly to the waste paper bin. The Newsletters, if

they were to be effective, had to catch the busy lecturer's eye. Considerable attention was given to the initial design, especially to the heading and the prominence of the name of the new course. Graphics were used, not necessarily with more than passing horticultural interest, but to catch the eye, to add variety to the page design, and to distinguish one Newsletter easily from the next. For similar reasons, each edition of the Newsletter was printed on different coloured paper. (See Appendix E3 for copies of the six Newsletters).

The Newsletters were written and formatted by the researcher. They purported to be more collaborative than they actually were. They made frequent use of 'we' in reference to decisions made and how the networking was proceeding but, in fact, they were mainly the work of the researcher and no writing was done by anyone else involved in the project. Draft copies of the first two Newsletters were distributed to involved parties before they were finalised, asking for comment and alterations, but nobody responded. This was 'research business' as distinct from 'teaching business' and none of the coordinating team members made any suggestions for changes. The third and subsequent Newsletters, therefore, were not read or checked by anyone else. Although the research was mentioned in most Newsletters, the researcher never was identified as the author, and it was reported at one of the meetings that a number of lecturers thought they were being written by one of the original course writers. This enabled the writer to avoid being identified as an outsider, and the Newsletters probably held more credibility.

Much of the material in the Newsletters arose from the meetings. Because lecturers at the first project meeting seemed to be worried about assessment, the second Newsletter contained an item about assessment. The Bunbury meeting gave rise to discussion about the role of the teacher in competency-based teaching, record keeping and articulation. Hence the third Newsletter concentrated on those topics. The fourth and fifth Newsletters expounded on the issues raised in the second project meeting, while the sixth reported the development plan discussed at the Midlands meeting. Other items arose from the questionnaires (see the next section for details). When a

respondent indicated that something was not known or understood, the information was given in the next Newsletter.

The Newsletters quickly found a distinct identity. As the researcher began to understand the culture and expectations of the lecturers, the Newsletters fell more and more into their language. They were friendly in style and combined humour and seriousness. They summed up, expanded and developed (and in some cases corrected misconceptions about) the issues which had come up in discussion at meetings, from the questionnaires, or from conversations with individuals on the telephone.

Feedback on the Newsletters was sparse, but positive. After the first one had been distributed, a senior lecturer from a Regional college telephoned the researcher to comment enthusiastically. He said it was an excellent idea, but that they needed to be addressed individually to all lecturers in the study area to make sure that they reached them, and did not stop on a senior lecturer's desk. At first, the researcher had not been able to ascertain to whom the first Newsletter had been distributed. There were gaps in the mailing list, and some had been addressed to the 'Horticulture Coordinator' or 'Senior Lecturer' and might not have reached the intended staff. The researcher worked with the Murdoch campus secretary to compile a complete set of names and addresses for the study area throughout the state, but it took several months before the final names were added, and some individuals missed the first couple of editions.

As feedback quickened, it became clear that a wide cross section of staff were reading the Newsletters and finding them useful. Another senior lecturer sent a message from a rural centre to say he was 'most impressed'. Telephone calls began coming in from senior officers outside the horticulture study area, commenting on the approach and content of the Newsletters and, in one case, remarking that he didn't understand why nobody had thought of doing it before. They led to three speaking engagements for the researcher to address senior (non-horticulture) staff on the dissemination project and on competency-based training.

There were six Newsletters, one each month from April to September. The original plan envisaged three or four, in line with the planned time line of three months, but, as mentioned above, the project moved at its own pace and the researcher continued to cater for its demands for several months longer than expected. To a limited extent, the Newsletters tell the story of the project. They reflect how slowly some of the concepts developed, and the sort of problems occupying the attention of the project team. They also gave the researcher an opportunity to push the project along and keep it on track.

In the case of nine (18%) lecturers, the Newsletters were the only information they received about the project. These lecturers were not expected to be implementing the new course in the foreseeable future. However, the Newsletters gave them the opportunity to know what was going on among their colleagues and receive enough information to be able to discuss the issues amongst themselves if they wished. While feedback was received from only a small number of staff, it was positive, and it was hoped that the Newsletters' novelty would help them penetrate into areas where they would be most needed. The Newsletters are included as Appendix E3.

The questionnaires

Two questionnaires were distributed to all lecturers at the colleges and centres thought to be interested in running the new course the following year. At the time when the sample was selected, it was not possible to know with certainty which centres these would be, but the most likely ones were chosen with the help of the Study Area Leader. Copies of the two questionnaires are included as Appendix E4.

Thirty two copies of both questionnaires were distributed to those most likely to be teaching the new course. Fourteen replies (43.75%) were received for questionnaire 1 and 15 replies (46.88%) for questionnaire 2. The low response rate must be interpreted as a problem and draws attention to a weakness in the strategy. The constraints of distance, in particular, and the consequent difficulty of establishing face-to-face

contact and communication with lecturers in rural centres, meant that a dependable two-way communication process was not established. Furthermore, there were lecturers in metropolitan colleges who did not respond and, while the project might have been disseminating well one way, there could be no check as to whether the messages were being received, or whether they were useful.

Approximately 25% of the respondents to both questionnaires were senior staff. Staff in more junior positions have a tendency to leave the decision making to their senior staff, and the strategy did not appear to have the desired affect of involving them as deeply in the project as might have been desired.

The first questionnaire

It was the intention of the first questionnaire to explore lecturers' views about the curriculum change process and, in doing so, to raise their awareness, in advance, of potential difficulties and problems in implementing the new course. The first questionnaire contained three kinds of questions.

The first four questions were meant to identify and locate the innovation within the respondents' consciousness, and to enable the researcher to gauge how many of the respondents would be implementing the new course. A second group of questions focused on factors identified in the earlier research as causing lecturer frustration, such as lack of time for preparation, lack of involvement in development, lack of reward or recognition, lack of acceptance of the innovation, the need for change, or the amount of change. The questions were intended to explore the readiness of respondents to cope with these issues. The remaining questions were intended to project respondents' thoughts forward to what the change might mean to them and their colleagues in terms of support available, time commitment, materials development and the effect on students.

The first group of questions did not produce very useful information, as too few lecturers knew at that stage whether they would be teaching the new course or not. Their main usefulness was that the questions themselves were instrumental in spreading knowledge about the new course.

The questions on readiness produced a high degree of acceptance of the inevitability of the changes. Most respondents displayed some degree of understanding of the reasons for the new course and a knowledge of national changes. They indicated a good grasp of the conceptual changes involved. There appeared to be a high level of thoughtful acceptance of the need for the changes, even though a number of the respondents hadn't read the syllabus documents nor knew whether they were to teach the new course or not. On the other hand, there was some apprehension and lack of knowledge of what the changes would mean on a personal level. These responses are not unlike the answers to the survey questionnaire described in Chapter 5, mostly positive, but based on a degree of ignorance. Some of the answers were cynical, reflecting some low morale.

A number of comments included with this group of answers were followed up and developed in subsequent Newsletters.

The third group of answers gave a picture of a group of hard working, slightly martyred lecturers out there battling against the odds, determined to cope and protect their students from being affected by their problems no matter what. "There is always some sort of pressure" perhaps sums up the majority attitude. There probably would not be enough time and enough support, but that's how things are normally. There were conflicting statements in some of the responses, which could reflect that filling out the questionnaire often was done in a rush. The final question on the sort of support and assistance needed provided some useful information, which was built into the ongoing research plan.

The responses overall enabled the researcher to begin building a picture of the identity of the lecturers, especially those from rural colleges who did not attend the meetings. A detailed analysis of the first questionnaire can be found as Appendix E5.

The second questionnaire

The second questionnaire was entitled *Participation in new curriculum,* and indeed it was the intention in the original plan outlined in Chapter 3 to explore the depth and level of involvement of implementers. However, the strategy had developed more slowly than anticipated, and neither the Study Area Leader nor the curriculum officer could give a clear picture of implementation plans for the second semester or the following year.

Under these circumstances, the purposes of the questionnaire were reconceptualised. Three new aims were constructed, as follows:

1. *Data gathering.* To try to find out from the college level where the new course was to be offered and who was to be involved in it.

2. *Support.* To offer support and a sense of 'somebody cares' to those who might have had to cope with innovation with virtually no materials development. (The strategy had not developed far enough by the end of the second semester to have overcome the problems identified in the previous chapter, and this was seen as a temporary stop-gap to encourage a sense of involvement.)

3. *Input and feedback.* To encourage a two-way process of communication by giving implementers an opportunity to express their ideas, problems and fears. (This was seen as necessary to increase their sense of ownership and involvement.)

Some of the information given by the 15 respondents was obsolete by the beginning of the second semester, when it became clear that the course was to run, as part of the pilot, in two centres. Staff in other centres did not know whether they would be teaching it or not and they had no sense of urgency about finding out. The data-gathering objective had not produced any new information.

The usefulness of the questionnaire as a technique of support and encouragement will not be known until mainstream implementation begins in 1995. As most of the respondents are expected to be teaching in the new course 1995, the timing of the questionnaire seemed to be psychologically sound and at least part of the second aim was fulfilled.

As a vehicle of input and feedback, the questionnaire produced useful ideas in answer to question 16, which asked: *If the project team is able to get further funding to prepare teaching materials of some kind for the new course, what sort of materials, or what sort of assistance, would you find most useful?* These answers were edited and discussed at the Midlands meeting, and distributed to the lecturers involved in the development of teaching packages. (Refer to Appendix E6 for details of these answers).

Information from the questionnaires about the non-receipt of Newsletters or the Lecturers' Guide was acted upon, and further mailings were made to those who thought that they had missed out. The subject reviews and the class record-keeping package had been dispatched together to all the sample group, but some responded that they had received one and not the other. This reinforced the fact that busy lecturers are not as likely to absorb printed materials received in the post, as they are to respond to face-to-face contact.

There was to be a third questionnaire according to the original plan. The *preferred* and *actual* situation questionnaire used previously in the questionnaire survey reported in Chapter 5 was to be distributed to all lecturers when they began implementing the new course. The findings were to be compared with the data from the earlier questionnaire survey findings, and a judgement made about whether the strategy had made a difference. However, implementation did not occur outside the pilot group during the period of testing the strategy and the third questionnaire would not have been relevant until the following year.

The network

Stenhouse wrote of the need for a 'coach', or a consultant observer to help teachers in their reflective process. "An outsider is in a good position to help experienced teachers to loosen the hold of habit" according to Rudduck (1991, p.111). Rudduck adds that:

> ... practitioners, unlike academic staff in universities, do not have research as part of their contract and there is no specific time allowance to support the research enterprise.... Partnership supervision ... rests on the straightforward assumption that the understandings implicit in teachers' intuitiveness and experience can be transformed into educational knowledge through critical reflection on practice and focused dialogue (p.109).

In the strategy, the researcher assumed a role of facilitating, encouraging, explaining, discussing and urging the project along and propelling it to find a focus and direction which it would not have found by itself. Most of the lecturers were prepared to leave it at that, accepting as much as could be given to inform and assist them. Few lecturers initially were prepared to step far outside their busy schedules to become involved in development. The exceptions were the senior lecturers and the Study Area Leader, who added a degree of project ownership to their existing management roles.

The fundamental element of bottom-up involvement lies in basic communication between lecturers, discovering what is going on and being prepared to talk to each other about their concerns. The vision of the 'network' consisted of all the innovating lecturers becoming excited about the new ideas, picking up the telephone and talking openly and generously with each other, exchanging and sharing ideas and reaching mutually acceptable decisions for implementing change. It was thought that a modest level of 'coaching' as a dissemination technique would trigger a vigorous diffusion of ideas throughout the study area.

The technique used was to make frequent reference to the concept of networking whenever an opportunity arose and to encourage it as a feature of the change process.

As the excerpts below show, the Newsletters made continuing reference to the importance of sharing ideas and discussing the new subjects with each other:

> We envisage a network of lecturers, where everybody concerned is available on the telephone and has time to talk about how the course could be taught. We want you to feel that you can talk to each other and to discuss your thoughts, successes and anxieties as the teaching materials are being developed (Newsletter 1).
>
> However, if you can't attend meetings but want to have some ownership of the new course, you are strongly encouraged to get on the telephone and discuss your ideas with the appropriate coordinating person. The list of coordinators is similar to that in the last Newsletter (Newsletter 2).
>
> The importance of the 'network' concept as a way of preparing for the new course was also a popular topic (Newsletter 3).
>
> This was a widely representative group, and most worthwhile in bringing together lecturers from the pilot course and others who are going to be teaching the new course shortly (Newsletter 4).
>
> These lecturers then can be available to talk to and advise other lecturers starting the new subjects next year (Newsletter 5).
>
> One of the aims of the curriculum dissemination project was to encourage the concept of communication and networking among those people involved in the new course. Unfortunately it has not involved much face-to-face contact outside the metropolitan area, which is a great pity. However, we strongly encourage you to continue to build on the network, to get on the telephone and to discuss issues as needed (Newsletter 6).

Telephone numbers of pilot lecturers, colleges and centres planning to implement the new course and those involved in the project team were given in four of the Newsletters, stressing the invitation to join in and help each other with understanding and accepting the innovation. The importance of the network concept was included in the researcher's presentations at all four meetings, and discussed in detail at the Bunbury meeting.

It was difficult at the time to know what effect the strategies were having. Feedback was irregular and unplanned. Replies to the second questionnaire indicated that 64% of the respondents knew the telephone number of another lecturer who would be teaching the same subject, and that 40% had telephoned or talked to someone who would be teaching their subject to discuss teaching plans. Several indicated that they didn't

know what subjects they would be teaching, but implied that they would be talking to their colleagues about their subjects when they knew. The network concept, and the desirability of collaborating and sharing ideas will be emphasised again when the teaching packages are formatted for distribution, and the telephone number of the developer responsible for each one will be given as a contact person for discussing implementation problems. The role of the Study Area Leader as the focus of the review and revision process also will be reiterated.

Some feedback occurred regarding occurrences of staff room diffusion. Staff apparently were taking note of the issues, especially those in the Newsletters, and were talking about them. Diffusion also occurred at and after the meetings. The researcher observed that the two hour bus trip back from the Bunbury meeting was a high point in the diffusion process, when potential innovators and senior lecturers established mutually common ground on the meaning of the direction of the new curriculum. It happened unexpectedly during casual meetings of concerned people. It happened in the positive acceptance of the researcher as one of ‘us’ as distinct from ‘one of them’ in the level of feedback throughout the project.

The most positive feedback on the usefulness of the network occurred at the Midlands meeting after the researcher had left. The Study Area Leader reported later that the meeting had gone on to discuss the strength of the network as an ongoing strategy. It had been put on the Agenda under Study Area Issues (see Appendix E2). The meeting discussed it as a way of improving and consolidating what they already believed was a well-established networking system through their regular study area meetings. The participants expressed a desire that these continue under the new autonomous college system, but that it be extended to reach out to ‘grass roots level’, that is, all the lecturers in the study area. The meeting voted on a two-part plan: first, to continue to publish a Newsletter for distribution to all lecturers; and, second, to seek the support of senior management in all of the new autonomous college clusters for the continuation of networking through the biannual study area meetings. This official adoption of the

network concept and the Newsletters as strategies for future study area development confirms the acceptance of them as useful and powerful tools of communication.

The use and importance of the network cannot be evaluated until 1995, outside the scope of this research. However, the groundwork was established and some inroads against potential teacher resistance were observed.

The previous four sections discussed the four main *normative / re-educative* tactics of the dissemination strategy as they applied to the Certificate of Horticultural Skills. The following section examines the strategy again, recognising its uniqueness in the horticultural environment and discussing the variables which made its application perform as it did.

Variables in the dissemination strategy

The nature of the strategy itself was flexible and evolutionary, and points to the inadequacy of typical top-down approaches as a single strategy for change. The human factor is unpredictable. The researcher went into this project with a clear idea of how the strategy should work and the techniques to use to produce the required outcome. The strategy, however, took on a life of its own. Some of the reasons that it didn't develop as envisaged by the researcher have been discussed in the descriptive analysis above, but several unforseen, yet very obvious, factors need to be singled out for the determining effect which they had on the life of the project.

The project dealt with a very small study area and with a course designed for a lower skills level than most offered by TAFE. Although this was not a factor in the selection of the Certificate in Horticultural Skills as the innovation to be studied, it had a number of advantages. Having only fifty lecturers employed in the study area meant that the logistics of distributing Newsletters and other mailings were easily manageable. It was also possible for the researcher to get to know the names of everyone, to know where they worked and what they were doing, and to establish a closer identity with them.

The issues involved in introducing competency-based training, discussed earlier in this chapter, were also much easier than they had been in some other TAFE courses, and more likely to succeed in an easy course pitched at Australian Standards Framework Level 2. The compactness of the project also made it easier for one person to manage the various aspects of the strategy and to view it as a whole. The main disadvantage is that the strategy will be much harder to implement with another larger, more complex innovation at another time.

One of the unforeseen difficulties in the strategy was the timetable. There is no ideal time to introduce innovation in TAFE. TAFE lecturers are always busy teaching, examining or marking tests, or else they are on term or semester breaks and not available. The dissemination project was supposed to have spanned four months and be completed by the end of first semester in early July. However, the plan did not take the term and semester breaks into account, or how busy lecturers are just before or just after them. The process itself was much slower than expected. It took longer to gather impetus and kept going for two to three months longer than planned. The advantage of this is that the delay meant that implementation did not commence, other than the pilot program, and the situation offers itself for further implementation study and evaluation next year when the new course begins on eight sites.

The plan had assumed much wider face-to-face involvement with the lecturers. Even though a number of far flung rural colleges and TAFE centres were involved, the researcher believed that most colleges would send at least a couple of representatives to the project meetings. This did not happen, as described above. Distance was a real problem in implementing the dissemination process. The difficulty of releasing lecturers from small departments was a further problem. If the strategy is to be developed for further projects, attention needs to be given to increasing face-to-face contact in other ways. A further tactic needs to be introduced, namely, travel on the part of the change agent to discuss the innovation with rural participants. The Study Area Leader, after discussion with the researcher, agreed to take responsibility for this part of the strategy, and at the Midlands meeting announced his intention to make three

visits to rural centres to talk to lecturers about the requirements of the new course. A further regional meeting was planned to be held at Manjimup in November, which the researcher was invited to attend as an exercise added on to the formal project. Even the late application of face-to-face contact is expected to increase the level of involvement of those lecturers who could not attend the project meetings.

The funding allocation proved to be a significant factor in the strategy. Funding had been designated initially for travel and staff release but, when it was not spent for this purpose, it became available for the all-important task of materials development. The Department of Training does not have the resources to pay for large-scale materials development, and jealously shepherds allocations for this purpose. The strategy was set up originally with the idea of having teams of volunteers produce the necessary teaching materials, but the cultural behavioural patterns of the lecturers was not going to allow that to happen. There were to be no teams, no volunteers and, if there had been no funding, no development beyond the subject reviews written by the four initial pilot lecturers. A number of lecturers stated that they enjoy subject and materials development, but the present climate of low morale, insecurity of employment and industrial unrest, meant that they would refuse to add such activities to their already heavy workloads without being paid for it.

The human factor was important in several ways. The researcher was amazed at the amount of uncertainty and indecision, rumour, inaccuracy and misunderstanding when it came to understanding the plans for implementation. This account smooths some of the rough edges of reality and puts the story into somewhat logical order. However, at times everyone involved in the project appeared to have different perceptions of what the project was aiming for, and it took painstaking reflection and adaptability of planning on the part of the researcher to bring these all together into a whole, without causing offence. This must be typical of bottom-up involvement.

The project team and the researcher treated each other cordially and with patience. Common understanding was sought consciously and worked on. Open interaction

achieved progress and trust was established. The question needs to be asked about whether the strategy would have achieved as much as it did without this trust and interaction? The existing conflict within the study area did not affect the project, and the new Study Area Leader successfully grew into his role. If these potential conflict areas had developed differently, they could have damaged the progress of the strategy irrevocably. When setting up a strategy for future use, these human ingredients cannot be guaranteed in advance.

Another aspect of the human face of the strategy was the self imposed demands put on the researcher as change agent. The more the strategy looked like failing, the more important became the need to keep working on it and giving it constant thought and attention. This was important both to the researcher, for obvious reasons, and to the team which held high expectations that the researcher would know what to do and would come up with the right answers. Even as this research is being analysed and written up, the researcher is still involved in ongoing activities with the project team, with three more meetings both in and outside the metropolitan area scheduled and the packaging of the teaching materials to be completed by the end of the year. As a form of participant observation, the research created a role for the researcher which could not be abandoned suddenly.

The strategy has elements of top-down and bottom-up ownership existing side by side, as Rudduck (1991) and Marsh and Huberman (1984) claimed it could. The syllabus document had been imposed from above and lecturers were to make of it what they could. The lecturers, as indicated in the results of the questionnaire survey reported in Chapter 5, could only do justice to the new course if they had understood and accepted it on their own terms, within their own culture and meaning and with their own sense of ownership stamped on it. The researcher stood between these two perspectives, representing both the administration, which had given its blessing to the project and funding to make it possible, and the lecturers who were struggling with the personal meaning of the change. The lecturers required hard work on the part of the researcher as change agent, in that they didn’t know what they wanted or needed in advance of

implementation, and had to be cajoled and encouraged into becoming involved well ahead of time. The administration knew what it wanted and very little else was needed but to keep them in good faith with the efforts of the project team.

There was philosophical conflict in the researcher's role. There was conflict between the humanistic approach required by the lecturers, as the project demanded more and more time, effort and understanding, and the technological requirements of the management perspective within the TAFE system to get it up and running without any problems.

While recognising that this application of the dissemination strategy was unique, it is possible to judge its effectiveness at least in reference to this project, in this situation. The next section attempts to do this.

Effectiveness of the dissemination strategy

As the quotation at the head of this chapter implies, it is not easy to set up a plan which will fall into place and make it easy for practising lecturers to understand and accept what is involved in the process of innovation. Teachers have to recognise what exactly is being changed and it is not easy to help teachers to reach such complex understandings. Nor is it easy to assess what understanding they have reached.

Table 6.2 sets out the four stages by which the strategy developed over six months. It separates the effect of the dissemination process of the 'inner group', or those who became involved in two way communication, discussion, decision making and development, from the 'outer group', or those who merely received information. The table indicates that the inner group began with 6 lecturers, or 12% of the total study area. By the end of stage four, 32 lecturers, or 64%, had moved into the inner group, as developers, attendees at meetings or as respondents to the questionnaire. Table 6.3 sets out the participation and levels of involvement in project activities of all 50 lecturers. The information-giving function of the dissemination process reached 100% of the

study area in that all lecturers received the six Newsletters. The 41 lecturers (82%) who received at least one other mailing (Lecturer's Guide, the package of pilot reviews and marking plan, or the questionnaires) were estimated to include all, and more than, those who will be implementing the new course within the foreseeable future. The questionnaires, in turn, were distributed to those 32 lecturers (64%) who were most likely to be teaching the new course, this year or next. Thus the strategy gave opportunity to all possible implementers to receive information and to become involved in feedback if they wanted.

Eighteen lecturers (36%) responded to at least one questionnaire, thus becoming involved in two-way communication regarding the project. Not all of the respondents were very well informed or gave a clear picture of their understanding or acceptance of the innovation, but had begun the process of reflection on their part in the change process. They can be regarded as having some level of ownership.

A total of 22 lecturers (44%) attended at least one of the four meetings. Nine of these also had responded to at least one questionnaire, indicating their involvement on several fronts. Those who attended meetings and became involved in discussion and decision making were developing a higher level of ownership and already displaying a strong desire for the new course to succeed.

Table 6.2 Stages of the dissemination strategy

Stage	Strategy	Outcome	Inner group (Two-way communication and involvement)	Outer group (One-way communication only)
1 April - May	Curriculum document distributed Newsletter 1 Syllabus document First project meeting	Awareness raising information giving. Early decisions making points begin to be identified	6 lecturers at first project meeting. Inner group see themselves as change agents and decision makers, but not yet offering practical input.	Still a large unknown potential implementer group. Some positive feedback.
2 May - June	Newsletter 2 Study Area meeting at Bunbury First questionnaire Lecturer's Guide distributed	Wider involvement in and ownership of project. Ground cleared in discussion for important decisions. One lecturer produced Lecturer's Guide.	More lecturers move to inner group (14 lecturers, 11 of whom had not been at first meeting. Total of 17). The network concept accepted by inner group.	Reports of work of project team disseminated to outer group. Very little feedback.
3 June - July	Newsletter 3 Second project meeting Newsletter 4 Second questionnaire Reviews and marking plan	Four pilot lecturers write brief review of their courses. Lecturer input into marking plan. Eight Colleges or centres committed to running new course.	Practical input to project by pilot lecturers. 11 lecturers at meeting, 5 who hadn't been to the first PM, 2 not at either PM or SAM. (Total 19 lecturers attended meetings).	Greater positive feedback from outer group. Messages via senior lecturers. Feedback from questionnaires (Total of 18 individuals, 8 of whom had not been involved in meetings)
4 August - Sept.	Newsletter 5 Study Area meeting at Midlands Plan for teaching materials development in place Newsletter 6	Plan to develop materials accepted. Ownership strengthens to meeting taking over functions of the project. 9 colleges or centres committed to running new course.	Positive acceptance of features of the model by those present at the meeting (12 present, 3 of whom had not been present at earlier meetings. (Total of 22 lecturers attended meetings.)	Positive messages received from lecturers in rural centres not previously involved.
			32 people in two way communication. 24 people involved in meetings, pilot or development.	50 lecturers received Newsletters. 35 received questionaries, package or lecturer's guide. 9 lecturers without any communication or involvement except Newsletters.

Table 6.3 Involvement of lecturers in strategy activities

Lect-urers	News lets	Qus Sent	Pack-age	Lect's Guid	Qu 1 Resp	Qu 2 Resp	Proj Mtg 1	St Ar Mtg 1	Proj Mtg 2	St Ar Mtg 2	Pilot	Devel-oper
1	✓											
2	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓
3	✓	✓	✓									
4	✓	✓	✓	✓								
5	✓	✓	✓		✓	✓						
6	✓	✓	✓					✓				
7	✓											
8	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
9	✓											
10	✓			✓				✓				
11	✓	✓	✓	✓	✓	✓			✓		✓	✓
12	✓	✓	✓								✓	✓
13	✓	✓	✓	✓				✓		✓		
14	✓	✓	✓			✓						
15	✓	✓	✓									
16	✓	✓	✓		✓	✓						
17	✓								✓	✓		
18	✓	✓	✓									
19	✓	✓	✓	✓	✓	✓		✓	✓	✓		
20	✓											
21	✓	✓	✓		✓			✓				
22	✓									✓		
23	✓	✓	✓	✓				✓				
24	✓											
25	✓	✓	✓		✓	✓						
26	✓											
27	✓	✓	✓		✓	✓				✓		
28	✓											
29	✓						✓	✓	✓	✓		
30	✓											
31	✓			✓				✓				
32	✓	✓	✓			✓						
33	✓	✓	✓			✓						
34	✓	✓	✓		✓							
35	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
36	✓	✓	✓									
37	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
38	✓	✓	✓									
39	✓							✓				
40	✓	✓	✓		✓	✓						
41	✓	✓	✓									
42	✓	✓	✓	✓		✓		✓	✓		✓	✓
43	✓			✓						✓	✓	
44	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
45	✓	✓	✓									
46	✓											
47	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓
48	✓										✓	✓
49	✓						✓				✓	
50	✓	✓	✓									
	50	**32**	**32**	**15**	**14**	**15**	**6**	**14**	**11**	**12**	**12**	**10**

	Received materials: One way communication
	Answered questionnaires: Two-way communication
	Attended meetings: Two-way involvement
	Pilot and development: Deepest involvement

The highest level of involvement and ownership occurred amongst those lecturers who taught the pilot subjects (24%) and became involved in the development of teaching packages (20%). One of these had not attended meetings or responded to either questionnaire. Because the project team continued to refer to the first round of teaching as the pilot program, these lecturers were singled out as having a special investment in the course. They were referred to in the Newsletters as 'the pilot lecturers', and were given special acclaim as those blazing the trail for later implementers. Ten of them (20%) were selected, and paid, for developing materials for the others. Their reward included both acclaim and financial remuneration. Their ownership and involvement in the innovation was expected to be total, although this research did not continue to track them through the process.

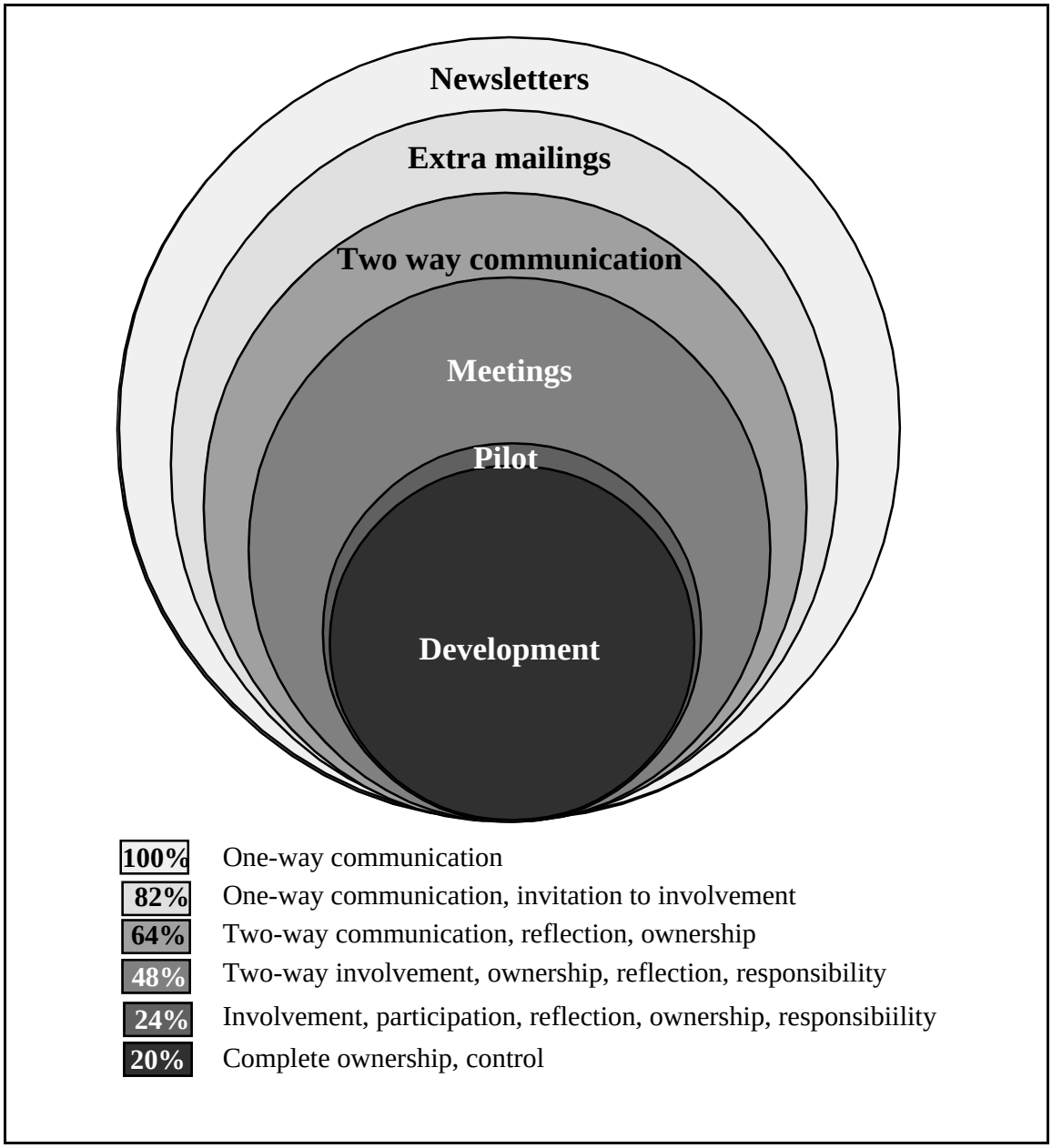
The level of involvement of the 50 full-time lecturers in this project is represented in Figure 6.2. The percentages of staff participating in each level of activity are represented as a model of decreasing levels of involvement, with the darker colours representing greatest involvement and the lighter outer circles representing least involvement.

The strategy attained an acceptable level of penetration throughout the study area. It offered information and support, and opportunities for interaction with the project team. It also included a plan for the development of teaching materials, so that lecturers would not have to develop their own materials in isolation as they began teaching.

The initial objectives of the dissemination strategy were:

1. *to provide lecturers with information, involvement and support with as many of the essential and important factors possible from the list identified from the survey*
2. *to remove as many of the identified constraints as possible, and to work as comfortably as possible within those which cannot be removed*
3. *to set up strategies to encourage lecturer participation and ownership, to involve them in the study of their own practice, and to break down feelings of alienation and resistance.*

Figure 6.2 Involvement of lecturers in preparing for innovation



The application of the strategy can be regarded as successful, if not complete. It fulfilled the meaning of the objectives set out above. It provided information and support, although involvement did not occur to the extent that it was hoped. All the factors from the list identified from the questionnaire survey reported in Chapter 5 were dealt with in some way, but not necessarily forcefully enough to have made a lasting impression on the implementers.

A number of the constraints were removed although, again, it was a question of degree. Face-to-face interaction occurred with almost 50% of the lecturers and ownership was increased. The follow-up visits to rural centres could increase this to almost 100%. Sufficient funding was obtained to make basic materials development possible. A realistic time line was followed and information, support systems and teaching materials were in place well before implementation was due to begin. Leadership was provided and the vision of successful change promulgated. There was some evidence of raised staff morale, although there was not enough feedback to know if it was widespread. Certainly the majority of the horticultural staff will be ready for the new course, and all would have had been given ample opportunity to be ready if they had so chosen.

The third objective was achieved in terms of tactics to encourage lecturer participation and ownership and to break down feelings of alienation and resistance. There wasn't much opportunity for lecturers formally to study their own practice and it is doubtful whether they would have had the time to give to formal reflection even if the strategy had been able to enforce it. However, reflection was encouraged in all the strategies used, and feedback indicated that much informal discussion and introspection on the meaning of change was occurring throughout the study area.

There can be little doubt that the lecturers will be better off from their experience of the dissemination project than those in other innovation projects who have not received the information, involvement, support, materials development, the removal of constraints, and encouragement of participation and ownership offered by the strategy. Further research outside the boundaries of this study will be needed to determine how much better off they will be.

Conclusion

This chapter described and analysed the application of the dissemination strategy to a TAFE curriculum innovation, completing the third and last stage of the research design. The strategy was concerned with providing lecturers involved in curriculum change with information and support, removing constraints and encouraging participation. A number of tactics was applied to the Certificate of Horticultural Skills and examined critically for their contribution to the success of the overall strategy.

A longer-term purpose for developing and testing the dissemination strategy was to ascertain whether current TAFE practice could be improved if attention were paid to the defined tactics and whether the strategy could be used with future TAFE projects. Another purpose was to explore also the claim that "teacher ownership can exist side by side with central initiative and direction, and that ownership can legitimately be claimed by both teachers and central administration" (Rudduck, 1991, p.124). These questions are discussed in the next chapter.

Chapter 7

Discussion

It is praiseworthy to seek new knowledge ... but in that seeking you have the responsibility not to overestimate your understanding of what and whom you seek to affect. (Sarason, 1990, p.119)

This research began with the hypothesis that the current TAFE curriculum dissemination process was marked by serious problems, which needed to be identified and for which solutions needed to be found. A pilot study based on interviews (Chapter 4) and a questionnaire survey (Chapter 5) identified and analysed the problems. Then, a dissemination strategy was devised to overcome the problems, trialed in the field and assessed, as reported in Chapter 6.

Chapter 7 examines nine important characteristics of the dissemination strategy in detail. The characteristics are extrapolated from the Horticulture project and an attempt is made to envisage how they might apply more broadly to curriculum innovation throughout the TAFE sector in Western Australia. A new strategy of curriculum change is then proposed, based on bottom-up lecturer participation within the existing top-down management structure. Finally, the implications for further research are discussed. Before looking at these issues, however, an overview of the first six chapters of the thesis is given.

Review of this thesis

The research reported in the preceding chapters examined the hypothesis that official neglect of dissemination practice is causing unnecessary stress and inefficiency among TAFE lecturers and harming the process of curriculum renewal in many TAFE courses. It was contended that the improvement of dissemination practice would help lecturers understand and accept new curriculum products more easily, reduce personal frustration, prevent time-wasting and assist TAFE lecturers to perform their jobs more efficiently. It was suggested that energies put into well considered dissemination

strategies early in the change process would, in the longer term, save energy, time and funds.

Chapter 1 of the thesis explained the need for research within the context and culture of the Technical and Further Education (TAFE) sector in Western Australia. The need for attention to be given to the curriculum dissemination process had been identified through discussion with TAFE lecturers in university in-service courses in curriculum studies. These lecturers appeared angry and confused by curriculum change and, while they believed that their courses need to keep pace with industry and technological change, they frequently were critical of how course upgrading was done and antagonistic towards those who had imposed new curricula on them without adequate preparation and without taking account of their opinions.

It was argued that curriculum dissemination had become a recognisable problem in TAFE with the transition to the 'new TAFE' profile in the 1980s and that, before the problem had had time to be resolved, its symptoms were exacerbated by the subsequent change to the 'new corporatism' in the 1990s, with its emphasis on TAFE restructuring and entrepreneurialism. It was noted also that the original problem became more urgent during the life of this research. Curriculum development procedures and the requirements of national and State bodies were described and discussed in the context of recent national restructuring, to give some understanding of the culture and meaning of the political and philosophical climate within the TAFE sector.

Reference was made in Chapter 1 to school-based research into curriculum change, and in particular to that emanating from the UK and the USA. While many of the issues defined in the literature are relevant to curriculum change in the TAFE sector, the philosophical, professional and organisational patterns of TAFE colleges are different enough from those found in schools to justify a serious study of dissemination practice in TAFE. It was claimed that the principles and issues which apply to TAFE in Western Australia are relevant to training curriculum development in other Australian

States and to other comparable systems in other countries where top-down mandated reform is the usual method of instigating change.

In Chapter 2, the issues of TAFE curriculum dissemination were located within the history of curriculum theory developed over the past 25 years. Chapter 2 examined the theory and practice of curriculum change and redefined the area of study within the concepts of the research literature from the USA and the UK during this period. Curriculum dissemination is not an easy area to define. It overlaps with orientation, adoption and implementation issues. It interacts with and is involved in them, to the extent that a number of writers on curriculum change avoid using the word 'dissemination' altogether in their writing.

Some researchers have produced lists of important factors in the facilitation of change and these can be regarded as useful guides for administrators and change agents. Lists and models, however, frequently overlook the wide range of variables involved in changing human practice. Smooth and successful curriculum change is enormously difficult and time consuming and cannot be accomplished without potential implementers becoming involved and accepting the change on their own terms and according to their own constructs of reality. While many systems currently mandate change from above, and will continue to do so, there is a need to find compromises which enable users to find their own meaning and ownership of new ideas. According to several writers, teacher ownership can exist side by side with central initiative and direction, and ownership can be achieved jointly by both teachers and central administration.

United Kingdom researchers long have stressed the importance of a strong teacher participation role in curriculum change and the need for involvement of teachers in the development and decision making process. However, ownership is fragile, very difficult to define or measure, and has many levels. The human face of collaborative teams working creatively on defining and filling their own needs can be whimsical and fraught with conflict and emotion. On the other hand, collaborative development often

needs to be steered and coached, and sometimes top-down decisions need to be made on theoretical issues which are outside teachers' knowledge and experience. Also, teachers might need to be convinced to cooperate in change.

Curriculum dissemination was defined, for the purpose of this study, as the process of *informing* teachers about new or revised curriculum ideas, documents or materials, so that they *understand* and *accept* the innovation. The definition used in this study does not come from the literature, but has been extrapolated from existing research and from the needs and requirements of the local TAFE scene. It is tailored to fit both top-down, prescriptive, political and technological frameworks, and bottom-up, humanistic and user-centred situations. It accommodates mandated reform alongside cultural and personal meaning and individual interpretation of lecturer and student needs. Dissemination in this sense can be planned, but not predetermined, and it should exist as a central characteristic of the change process.

Chapter 3 was concerned with the design and methodology of the research. The research in this study consisted of three major parts: a pilot study of four TAFE curriculum innovations, based on the analysis of semi-structured interviews; a questionnaire survey, using a *preferred* and *actual* situation instrument and questions seeking demographic and other data; and a field test of a dissemination strategy. Chapter 3 described the methods used, wherein each stage of the research produced the data on which the next stage was based. It described how the initial issues were identified from the pilot study and reformulated to develop the items for the survey questionnaire. Then from the analysis of the survey data, a list of factors was delineated and sorted into levels of importance. The systemic constraints also were identified. From the findings accumulated from the different stages of the research and from the literature, a dissemination strategy was devised to put into practice in the field with a newly accredited TAFE course.

The pilot study was described in Chapter 4. Interviews were conducted to discover what TAFE lecturers and administrators involved in four curriculum innovations

understood by the curriculum dissemination process, and what they thought were the strengths and weaknesses of the process from their own experience of finding out about, accepting and understanding curriculum innovation. Four curriculum change projects were analysed to check the validity of the hypothesis and confirm that there was indeed a problem. The pilot study also ascertained the need for further research in the area.

The analysis of the four projects identified a number of negative and positive factors influencing the success of dissemination and implementation of curriculum innovation. These factors were those noted as affecting users' understanding and acceptance of the new curricula. Most of the lecturers and senior officers interviewed were unaware of the theories of curriculum change and their responses came directly from their personal experiences.

The semi-structured interviews pointed to some successful communication and support strategies in place but, overall, the data indicated that not enough attention had been given to techniques needed for successful dissemination, and in particular to information giving, support, involvement, feedback and conflict resolution. Participants in three of the four projects expressed a high level of discontent and in some cases the criticism was extreme. The pilot study indicated that little planning had gone into convincing the users that the curriculum materials were valid, or that lecturers had a right to a share of their ownership. The findings from the pilot study provided data on which to formulate the survey questions used in the next part of the study, described in Chapter 5.

Chapter 5 was concerned with a questionnaire survey of lecturers involved in innovation. The survey questionnaire was administered to a sample of TAFE lecturers involved in recent curriculum innovation. The survey questions allowed for the collection of data which were more focused on the specific factors of dissemination.

A number of open-ended questions included in the survey questionnaire elicited valuable data, again confirming that there were serious problems in communication, support and lecturer involvement in the change process. The overall conclusion from this part of the study was that the majority of lecturers believed that the change had been necessary and that they were happy to be part of it, but that they had been given very little support and that the experience had been unnecessarily stressful.

The questionnaire was structured to 'educate' the respondents on dissemination issues, by way of the *preferred* situation questions, before eliciting their judgements on how successful they *actually* had been. The quantitative data elicited from the *preferred* and *actual* questions enabled the researcher to measure the degree of difference between the *preferred* and *actual* factors and to identify those which needed greater attention in the change process. It also enabled the researcher to sort out those which were *essential* or *important* from those considered to be merely *useful, of limited use* or *not necessary* in the dissemination process.

The factors which needed greater attention and those which the users considered *essential* or *important* for effective curriculum dissemination were put together with the constraints identified by Curriculum Services staff and the findings from the research literature, to devise a strategy, or a series of tactics, for curriculum dissemination. The strategy was put into effect in the field with a real TAFE project as the third and final stage of this research. This was described in Chapter 6.

Chapter 6 gave a description of the progress and development of the dissemination strategy. It also gave an estimate of its level of success in reaching innovating lecturers and the level of involvement of different groups in the study area, according to their differing degrees of participation. The project chosen was the new Certificate of Horticultural Skills. Dissemination tactics included the distribution of relevant curriculum documents, two project development meetings and presentations by the researcher at two study area meetings, the distribution of six Newsletters throughout the study area, the administering of two questionnaires to encourage two-way

communication, and the setting up of a ‘network’, which encouraged lecturers to get in touch with each other, discuss the new course and share ideas. It also included finding funds, the offer of leadership and involvement on the part of the researcher in an attempt to raise staff morale and confidence in the face of change. Most importantly, it sought and found a way to involve at least some of the lecturers in the development of teaching materials to be made available to all lecturers due to begin teaching the new course in the new year. Belatedly, a further tactic involving visitation and face-to-face meetings with rural lecturers was included.

The strategy was slow to develop but gradually took on a direction of its own according to the experience and cultural meaning of the lecturers concerned. It was fuelled by the eventual acceptance of the researcher by the ‘inner’ group of lecturers and the establishment of mutual trust, and reached the peak of its impetus some four months before implementation of the new course was due to begin.

The formal research came to an end when the dissemination activities had achieved observable effect and the project was handed over to the Study Area Leader to steer it through the implementation and review stages and, if necessary, further. By the final meeting, the Study Area Leader had decided to continue publishing the Newsletters and developing the network as an ongoing strategy. The conclusion of the formal study leaves further research still to be done, involving the researcher and the Study Area Leader in overseeing the development of materials and visiting rural colleges for further meetings, as well as monitoring the new course when it is implemented on eight sites next year. However, these activities lie outside the scope of this thesis.

The primary aim of this research was fulfilled in the application of the strategy. The dissemination strategy was the climax, so to speak, of the research. It was through this strategy that all the findings were brought together and trialed in the field. While the analysis indicated an acceptable level of success with the selected project, the question

needs to be asked whether the tactics used would be suitable for use as a dissemination strategy for future innovations within the Western Australian Department of Training.

The next two sections of this chapter explore the question of broader application of the strategy, looking first for possible variations when applied to innovations other than the Certificate of Horticultural Skills course and, second, at the management requirements for a new strategy of curriculum dissemination for TAFE.

A strategy for future curriculum dissemination?

The nature of the variables incorporated in the strategy has the potential to change the character and direction of the dissemination process in different sets of circumstances. This section discusses nine characteristics which had an important impact on the development of the strategy in the context of the Horticulture project. It looks at the implications for applying these as variables to TAFE innovations in wider contexts.

A number of characteristics which added to the uniqueness of the Horticultural dissemination strategy were extrapolated from an analysis of the model described in the previous chapter and are discussed here as variables needing to be considered in any future practice:

- the change agent
- the style of the group and their acceptance of the change agent
- funding for curriculum materials development
- administrative support
- face to face contact with potential implementers
- the history of change within the study area
- potential for staff conflict
- the magic and excitement of change
- management of the dissemination strategy within the TAFE system.

The change agent

The Horticultural dissemination project could not have operated without a change agent. There was no-one with seniority within the study area who had enough knowledge of the theories of change to have managed effective dissemination or diffusion before the mainstream course came on stream. In line with usual TAFE practice, most of the lecturers would have known little about the new course until they had to begin teaching it the following year. The pilot program would have run without significant carry-over to the rest of the study area. There would have been no materials development to assist new lecturers with the new subjects. The Study Area Leader and the senior lecturers would have found themselves picking up the pieces in response to the problems which would have arisen with State-wide implementation in the following year. It is the normal situation in TAFE to react to implementation problems, rather than predict them and prepare for them in advance.

In some study areas, the Study Area Leader might have the knowledge and experience to act as the change agent. However, the role is not recognised presently in the duty statements of Study Area Leaders and many do not feel empowered to think about it. Most see their roles from a management or administrative perspective, rather than as the initiators or leaders of change. Study Area Leaders are given little staff development or direction from a curriculum change perspective, and it is only by accident that the occasional new project includes techniques of broad information giving, support and shared materials development.

There might be some senior lecturers with the knowledge to initiate and manage a dissemination strategy. There is a lot of unrecognised knowledge and talent among senior staff. However, like the Study Area Leaders, their duty statements require them to be more managerial in their jobs and many don’t have a well developed knowledge of curriculum change theory.

Whether as Study Area Leaders or senior lecturers, change agents need to be employed within the system, and they need to understand the theories and processes of change and be attached to each curriculum innovation project. It is likely that they would need staff development in change theory and practice and be taught how to do the job.

The style of the group and their acceptance of the change agent

Some people are skilled at establishing a friendly and enthusiastic working environment with new groups, and some groups are easier to work with than others.

The Horticulture 'inner group' saw the choice of their new course for this research as a privilege bestowed on them and, thus, their attitude was positive from the start. They also had a positive image of themselves as being 'out in front', the ones who always got things right before other study areas, a small but vibrant group, prepared to do things better than others. They believed that they were the first study area to introduce a fully competency based course outside the Metals courses, although this was a misconception on their part.

Horticulture is a comparatively new training area and, as often happens in new areas, a number of staff are highly qualified. Some have university degrees in Agriculture, Biology and Soils Science. Most have strong industry experience, usually at management level. There was no evidence in this study area of entrenched resistance to trying something new. However, they did have a strong sense of 'them and not us' in their image of the administration in general, and this caused resistance of another kind.

A change agent needs to adopt something of the personality of the significant people in the group and to be seen to be on their side. This means putting in a lot of work talking to people, learning names and understanding the internal politics of the group. In the case of the Horticulture lecturers, a university person, even without horticultural

qualifications, was more acceptable than an official from Curriculum Services, or from the administration.

The willingness and cooperation of the lecturers is an important factor in dissemination success and needs to be nurtured. In the Horticulture project, initial willingness was present with those who attended the first project meeting, but it took time to create the larger 'inner group' and fire them with excitement to the point where they were ready to take on increased ownership.

In future applications of the strategy, a change agent, ideally, should be selected to fit the group, although that often might not be a matter open to choice. A change agent, however, should have at least elementary training in group dynamics and understand the importance of keeping on side with the group. Study Area Leaders might be in the best position to understand the style of the group within which they work and to be accepted as an appropriate change agent.

Funding for curriculum materials development

Development cannot be done without funding. Development takes time and must be paid for as time release, by contract, or by the appointment of someone to work with lecturers on a consultancy basis. The development of teaching materials needs to be done by a content expert, although they can be designed, supervised and formatted by a curriculum person. At present a low priority is given by the Department of Training to the development of teaching materials. Official interest in development ceases when the syllabus documents are accredited, although some study areas use funds earned from entrepreneurial activities, or from other sources, to pay lecturers to write teaching modules. Sometimes Staff Development funds are used to help disseminate ideas about a new course, but the emphasis is rarely on the development of teaching materials for use throughout the study area.

With the Horticulture project, funding was kept to a minimum and only lecturers who had taught the subjects in the pilot course were asked to undertake the development of the teaching packages. The teaching packages must be seen as a minimal level of development, and further development will need to occur when the subjects are reviewed. The Horticulture Study Area Leader in this case accepted responsibility for the systematic collection of feedback from all implementers and for communicating it to the developers for future incorporation. It might be possible for review and further development to be done without further funding.

There is no set funding procedure common to all study areas and much of the discontent expressed in the questionnaire survey evolved around lecturers having to research, design and develop their own materials as they began to teach a new course. Some method of funding needs to be put in place to cover not only travel and attendance at meetings but also for the development of materials as a prescribed part of innovation.

Administrative support

The change agent needs the support of the administration as well as the confidence of the group. The backing of the system gives credibility to the change agent and allows him or her to make important decisions when necessary.

In the case of the Horticulture project, the initial discussion and planning had been carried out by the researcher with Curriculum Services staff. The Director, Skills Formation, was fully acquainted with the project and had read parts of the earlier research. The Curriculum Services staff themselves selected the Certificate in Horticultural Skills as the project to be researched. The researcher was introduced to the Horticulture Study Area Leader by the curriculum officer who been responsible for the new course up to the point of accreditation. Over a year of contact had gone into establishing credibility with the curriculum staff and planning for the final part of this

research. The acceptance established with the curriculum staff carried over into the Horticulture project.

The researcher was seen initially by the Horticulture staff as being accepted by the administration and, therefore, having some useful knowledge to offer. However, the group in turn had to gain its own level of acceptance, as explained above, and woo the researcher to take their side against the administration. This only would have been possible with an outsider, in this case a university person. Rudduck (1991) and Godlin Roemer (1991) both discuss this phenomenon of being an outsider and simultaneously being accepted, and point to the complexity of the role.

The support of the administration was important also in that official funds were put aside for the project, administered and jealously looked after through Curriculum Services. This originally was envisaged as funding for travel and project development meetings but, when these did not eventuate on any significant scale, they were earmarked for the equally important task of materials development.

Face-to-face contact with potential implementers

Face-to-face contact has a powerful influence on ownership of ideas and in getting people involved. The strategy needs to maximise opportunities for face-to-face contact of the change agent and developers with implementers.

In the Horticulture project, it was difficult to bring about lecturers' willingness and cooperation until face-to-face contact had been established with a significant percentage of those to become involved in implementation. The first project meeting had been advertised widely, but only six potential implementers attended. This was not how the strategy had been conceived. The first real effect of the dissemination project was not felt until 14 people attended the Bunbury meeting and face-to-face contact had been established with 17 lecturers (34%). During the life of the formal research project, 22 (or 44%) of the lecturers eventually were brought into face-to-face contact

with the change agent, and this was considered to be a very important ingredient in spreading the ideas necessary for change.

Two-way communication had been established with 18 lecturers through the questionnaires and, while this was considered better than one-way communication, three respondents remarked specifically on a need for “discussion with staff from other colleges”, “someone coming down here and talking with us about it”, or meeting “with other lecturers to discuss the course”.

The Study Area Leader’s decision to set up regional meetings to talk to staff in rural colleges about the new course enabled this need to be met. The face-to-face impact of the first two of those visits was reported to be highly effective. “They were hungry for contact”, the Study Area Leader reported. “I was welcomed with open arms by both staff and students!” The Study Area Leader was so certain of the advantageous effect of the visits that he organised another regional visit later in the year, this time with the researcher, to increase the participation and ownership of those staff who had been isolated physically from the project. Plans for face-to-face contact through project meetings had failed in the strategy, but it proved so strong a need that it had to be incorporated after the formal conclusion of the research.

In the application of any ongoing strategy of dissemination, face-to-face contact with all potential implementers of the innovation, especially those in rural colleges who usually miss out on so much, should become a high priority.

Diffusion

The powerful effect of diffusion as ‘the unplanned spread of ideas’ should not be underestimated. Ideally the strategy should include both planned dissemination, or information giving and staff development strategies, and unplanned, ‘village pump’ style diffusion. It is during staffroom discussion that lecturers begin to come to grips

with the personal meaning of change. One of the aims of dissemination should be to create a climate for diffusion.

The success of the Horticultural strategy became more marked from the time when feedback began occurring about staffroom discussion on the content of the Newsletters. It had been hoped that the Newsletters would have this effect, but the feedback, while not great, was particularly pleasing.

By its very nature, diffusion cannot be planned. However, the strategy needs to be alert to its importance and attempt to foster it at every opportunity. If it doesn't seem to be happening spontaneously from the planned tactics, some sort of intervention, such as telephone calls to involve significant people in discussing selected issues, might need to be instigated.

The history of change within the study area

One of the factors which needs to be considered carefully in initiating a dissemination strategy is the previous experience of the study area in coping with change. Frequent, or difficult, changes in the past can colour the attitude of the lecturers towards further change.

Previous history on the part of the Horticulture study area had been mostly positive. The staff had a good image of themselves, as mentioned earlier. However, there had been recent trouble in that their attitude had seemed too positive and, before the project began, they had been reprimanded for spending too much money and getting away with more than their fair share of privileges. This had been expressed to the researcher by the curriculum officer early in the project and again later when he discovered the decision to pay the developers $200 each for producing the teaching packages. The decision had been made by the researcher in consultation with the Manager of Curriculum Services while the curriculum officer was on leave, but was

interpreted later as the project ‘being got at’ by the wily horticulture lecturers behind his back!

On the other hand, the fact that funds had been found had a very positive effect on the project group. They did not expect it on the one hand, but refused to do the extra work involved in materials development on the other. This situation had been inherited from earlier experience. They sat back and waited for the researcher to come up with a solution, maybe because that is how they always had done it in the past. The psychology of ‘a reward’ seemed right for this group and without doubt made a difference in making the project viable or not. One of the senior lecturers remarked on his questionnaire response, “For the first time it appears as if we may be doing it right!”

In other projects, the history of past success or failure could have enormous consequences in what works and what doesn’t. This is one of the most difficult factors in the strategy. It implies that someone must judge what is fair and proper in a given set of circumstances. Maybe this comes back again to the existence of a change agent who can be trusted by both the administrators and the innovating group to make decisions by professional judgement, or by instinct, as to what is fair and what is not in any given set of circumstances. This is a very difficult thing to build into an accountable strategy. It assumes a humanistic perspective on behalf of the decision maker and is not easily answerable for, with management in its present mood of corporate restructuring.

Potential for staff conflict

Staff conflict was identified in the pilot study as a significant factor in the change process. Any strategy of change needs to be familiar with the political situation existing within the change environment. The identification of points of possible tension or disruption should be part of the presage of any curriculum project.

The Horticultural project had potential for conflict in the tension between two of the senior lecturers, and one lecturer telephoned the researcher early in the project to talk about this. On one level, it might have been dismissed as idle gossip, but on another it was useful to know and keep in the back of the mind in case it flared up. Whether by design or by accident, the researcher will never know, one of the senior lecturers was not present at any of the meetings and unrelated arguments were kept out of sight.

A change agent should know about, but try to avoid, staff conflict. When it can't be avoided and begins to affect the project, it needs to be handled sensitively but positively. One of the factors necessary for dissemination success identified in the pilot study was 'conflict resolution'. This factor needs serious consideration in setting up any dissemination strategy for future application.

The magic and excitement of change

One of the most elusive but desirable qualities of a successful dissemination strategy is the creation of challenge and excitement in the face of curriculum innovation. This could be dependent on a number of the variables discussed above, particularly the personality of the change agent and the nature of the change group, as well as the history of change within the study area. It is least likely to work when lecturers are tired of frequent syllabus changes, or frustrated by the demands put upon them. It is most likely to occur when the change agent has well developed leadership qualities and can inspire a positive vision of innovation among lecturers and an enthusiasm for the processes of dissemination and implementation.

The change agent should be able to encourage enthusiasm and positive thinking, and be prepared to identify and respond to it when it occurs in others on the team.

Management of the dissemination strategy within the TAFE system

This research indicates that a strategy of dissemination needs to be added to the management of curriculum change. It needs to become part of official curriculum policy and practice within the Department of Training. It needs to put into place the tactics described in the last chapter and maximise the effect of the characteristics discussed above. This should not be regarded as a luxury, or an extra, in the curriculum change process, but an essential ingredient in a situation which already is costing too much in time and energy throughout the TAFE system.

Can this be done throughout all TAFE study areas without employing new staff or overloading existing lecturers? Can it be done without further structural change to existing management systems, or without further undermining the morale of lecturers already discontented with the climate of restructuring and their dangerously uncertain futures? Can it be done within the spirit of new corporatism?

The final answers to these questions require further knowledge of and research into operations and management theory and practice, and are outside the scope of this thesis. However, from the experience of this research, it appears that curriculum dissemination and its various activities and responsibilities should become part of the duty statements of the Study Area Leaders. They should become ‘curriculum leaders’.

Study Area Leaders don’t fit easily into the new autonomous college structure which currently is being introduced. They are the only college based lecturers whose duties extend outside their own colleges and who can be expected to know what is going on in their study areas across the State. It is essential that this cross college activity remain in place, and especially so in the area of curriculum change. Study Area Leaders, however, have not been encouraged to regard the tactics and strategies of curriculum change as a high priority and, in the majority of cases, are not well versed in the demands of change from a curriculum perspective.

They would need administrative support and better recognition of their roles in the system. They would need intensive staff development and a new image of themselves as leaders, rather than managers, in keeping up to date with the demands of industry and the changes required in training. They would need to become professional change agents and be recognised as such by the administration through adequate time and duty allowances.

Nine variable characteristics of a dissemination strategy for extended use within the TAFE system have been discussed in this section. There are no doubt others which might arise in future innovations, however, these represent the variables which arose from the Horticulture project and need to be considered as starting points for planning the dissemination of other TAFE curriculum change projects.

The next section is concerned with the issues of the top-down management perspective of change and bottom-up teacher participation and the need to find a compromise between the two.

Towards a new strategy of curriculum dissemination in TAFE

In spite of 30 years of research, dissemination and successful implementation are still the most difficult and least understood part of the curriculum change process, in schools as well as in TAFE. Change always has been difficult, and, while no attention is given to the task of good dissemination within the system, it always will be. This research has dealt with the emotional responses of lecturers to the frustration of trying to understand, in their own terms, how they are supposed to deal with change, and how they are expected to react to it. This in turn seriously interferes with successful implementation and the time and energy that it takes to get it right.

One of the positive advantages in the TAFE system is that change does occur. Unlike the schools, where there is often a choice of whether to introduce change and how much to introduce, TAFE lecturers regard change as necessary and ongoing. Those

with any contact with industry can see the changes occurring there and often share the excitement of technological advance in their own industry. Change will happen and go on happening in TAFE no matter how badly it is handled. It might be slow; it might be frustrating; it might make students and teachers suffer needlessly; it might cause time wasting and be undertaken with insufficient funds and no materials; but it will happen. The nature of the sector is to keep up with industry demands for relevant training as well as it can. The problem within TAFE is not whether it can, or will, change or not, but that the change process is unnecessarily inefficient and expensive in staff time and the consumption of emotional energy.

Much of this research has dealt with change from the perspective of the lecturers. It has described and analysed their problems and identified these problems from their point of view as users. The research has not found that lecturers are unreasonably pig-headed or resistant to change. On the contrary, it has found them to be excited to be part of relevant change and highly professional in their desire to see their courses improve and their students receive better training. It has found, also, that the expectations of them for change are too high.

It is necessary to take one last look at change from the perspective of TAFE management and view it again from the top down, before restating the role of dissemination in the curriculum development process.

During the application of the strategy, the researcher was in close contact with the staff at Curriculum Services and with the Study Area Leader of Horticulture. There was nothing but enthusiasm from these people and a strange feeling of relief that someone was doing something about a problem which had been worrying them for some time, and could have been getting worse.

The Director, Skills Formation, and several Assistant and Associate Directors were aware of this research throughout its development. When the time came to set up the strategy, funding immediately was offered to cover staff release time and travel. Other

significant constraints identified earlier in consultation with the staff at Curriculum Services were funding, time, the development of teaching materials and time to reflect, deliberate and collaborate. Again, the senior staff rallied to the requirements of the project, and ensured that staff involved in the development project were relieved of extra duties and a number of their normal tasks were dropped in priority. (This probably never happened, but the intention was there.)

There was a definite interest in the project and a desire by administrators to see the project succeed. That was not the problem. The problem was rather that very few people were aware of the knowledge-base on curriculum change theory and practice, which has been growing in different parts of the world during the last quarter century. It is not that TAFE administrators don't care, but that they don't know. Curriculum dissemination appears to be outside their perspective on management and organisation. It is not funded and provision is not made for staff collaboration nor the development of teaching materials. The management perspective conceives mandated change too simplistically. It is based on unproven theories of top-down reform and does not give enough attention to what happens when it reaches the implementers. It is assumed that, if change is planned and mandated, it will happen without further assistance (see Figure 7.1).

In practice, there is a severe trauma in the management perspective on the nature and flow of dissemination. There is a gap which interferes with the communication process and hampers the end users in understanding and accepting change and in their need to participate in its planning and development. In reality, dissemination is not occurring, although confusing and half formed ideas are being diffused (see Figure 7.2).

Ideally a change agent needs to be appointed to the project at about the stage at which the trauma appears, interpreting and converting the mandate and turning it around to become a user-owned process, reaching as many potential users as possible and

involving them as far as possible in collaborative development. The ideal strategy might look more like that depicted in Figure 7.3.

Figure 7.1 Management perspective on curriculum change

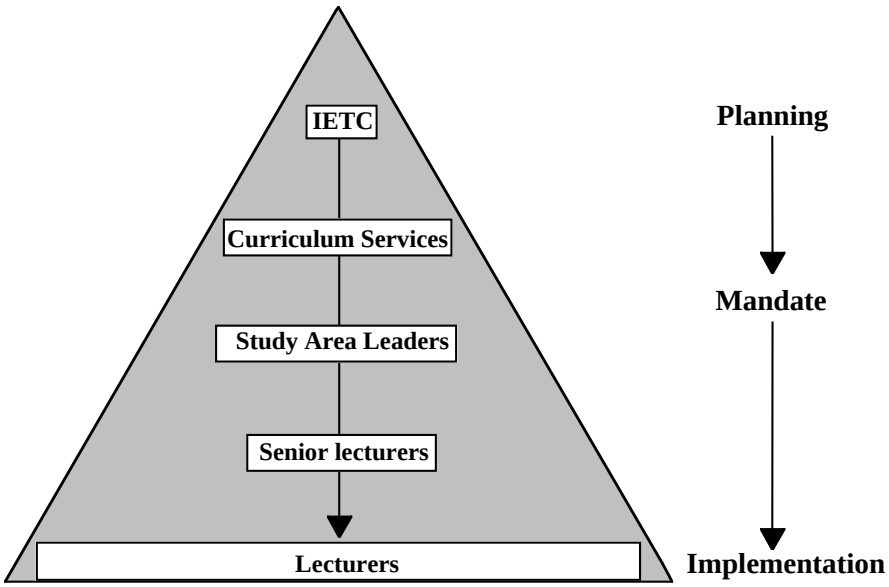


Figure 7.2 Trauma in TAFE dissemination process

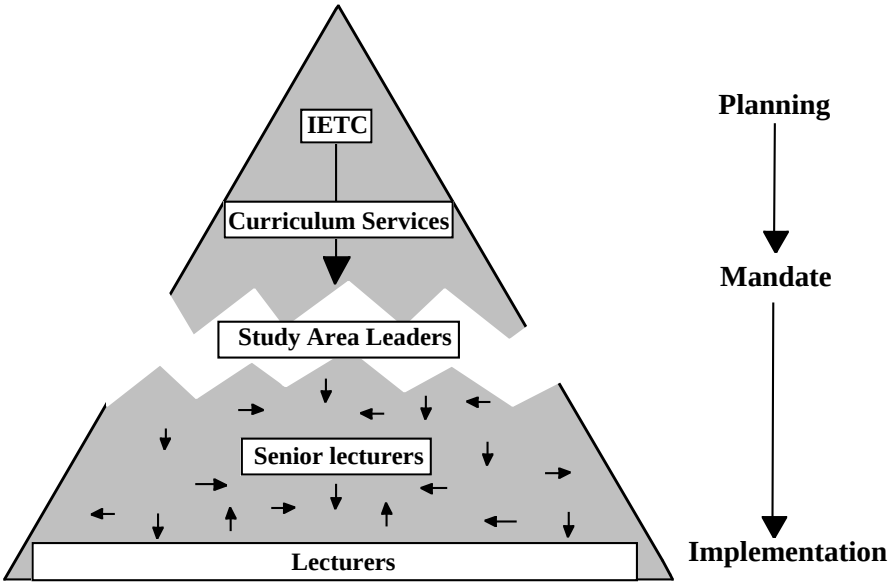
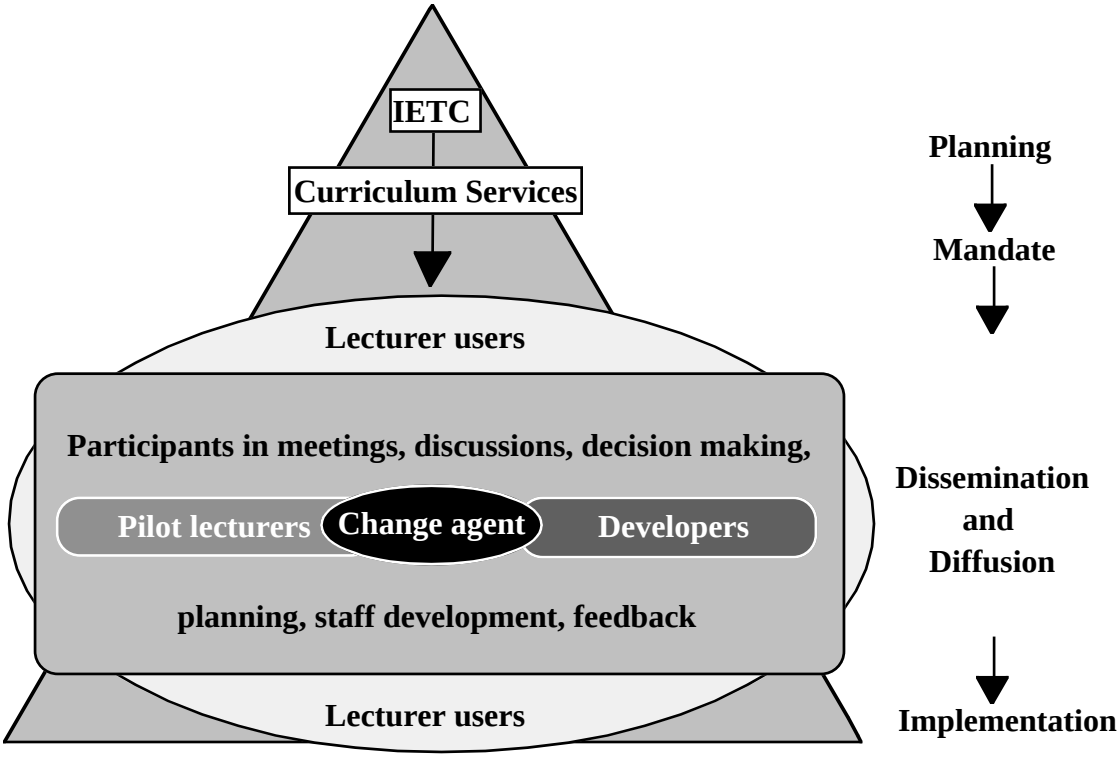


Figure 7.3 Ideal dissemination model



The dissemination and diffusion activity now becomes the most complex and most important part of the model, as distinct from the top-down models shown in Figures 7.1 and 7.2. In the ideal dissemination strategy, those participating in meetings, discussion, decision making, planning, staff development and feedback virtually coincide with the lecturer users, as occurred in the Horticulture project, although there probably always will be a small percentage of users who are not involved in any form of two-way participation. The most important feature, however, is that the communication pattern is centred on the change agent, and offers a total two-way channel of ideas between pilot lecturers, developers, participants and lecturer users.

Figure 7.3 also implies that there will be people within the study area who will not be involved in teaching the new course, and others who will be teaching but whose understanding and acceptance will not be complete. These are those at the ‘one-way communication’ level as depicted in Figure 6.2 in the previous chapter.

The dissemination process, therefore, needs to be approached as requiring both management and teacher perspectives. As Rudduck (1991) suggested, there is a need for a compromise in which ownership can be claimed legitimately by both teachers and central administration. It needs to include the meanings of both dissemination and diffusion. It needs to fit comfortably into top-down, prescriptive, political and technological frameworks, and bottom-up, humanistic and user-centred environments. It needs to accommodate mandated reform and shared interpretative ideas from the participant group, as well as finding a place for personal reflection and interpretation of directives. It needs to concern management, teachers and students. Dissemination should not be forced to fit into predetermined stages of curriculum change, but should exist as a central part of the change process, subsuming and being subsumed in all parts of the process.

The findings of this research offer a direction for the Department of Training to improve the process of curriculum revision and renewal in the TAFE sector by including in the change process a dissemination strategy based on the model above. The model might not be perfect and its application will need careful monitoring and evaluation as part of ongoing research. The next section looks briefly at this and other implications for future research.

Further directions for research

Four areas for further research arise from this study. First, further research into curriculum dissemination is required if the theories are to mature and become more widely accepted and inform better practice in the future. Second, the dissemination strategy developed as part of this research requires more extensive testing, evaluation and refinement. Third, the Horticulture project itself offers valuable research potential as it is implemented throughout Western Australia next year. Fourth, the methodology used in this research offers scope for modification and re-use.

The definition of dissemination developed for this research was not derived directly from the literature. Curriculum dissemination is a field of study where theory is still forming and, as normally happens, practice lags far behind the theory. There are still contradictions in the theory of dissemination in educational change (Fullan & Miles, 1992) and practice is affected by these and by political and management perceptions that making decisions to reform brings about reform (MacDonald, 1991). It is hampered also by busy teachers being unwilling to give time and energy voluntarily to prepare themselves for change, and too readily accepting the current practice of beginning new courses without proper preparation or involvement. There is a need for more studies, more publications and more attention to the detail of theory and practice before dissemination takes its rightful place as the central part of curriculum change theory. The role of diffusion as an important part of the dissemination process also needs further exploration.

The strategy and tactics advocated in this thesis require more extensive application and testing in the TAFE sector. Curriculum renewal is occurring in every study area in the TAFE sector at the moment, as courses are being rewritten and reshaped according to the national training reform agenda. This is a particularly difficult time for lecturers as they are required to come to grips with new educational concepts, new course structures and upgraded content. It is an appropriate time for attention to be given to techniques for making changes more efficient and less stressful, such as the application of the strategy to many more courses.

The dissemination strategy could be applied to all TAFE curriculum projects over the next few years and its level of success monitored and evaluated. Fine-tuning needs to occur to the tactics, and an analysis made of the importance of the variables as they occur in different projects with different groups. Extensive research and evaluation of the dissemination tactics during such a period of rapid change would be of particular value to managers, lecturers and scholars in the TAFE area.

The Certificate of Horticultural Skills itself offers a valuable field for an implementation study and course evaluation. SSAB guidelines decree that monitoring and review are part of the expected process of curriculum innovation. The researcher knows of no TAFE curriculum project yet to have been evaluated formally and reviewed under the new guidelines. The Certificate of Horticultural Skills course has a mechanism built in to make this happen and the procedure needs to be recorded and analysed through research.

The ongoing application of the dissemination strategy still needs further monitoring, as the initial materials development is in progress and further regional staff meetings are held. Then, when implementation begins and the innovation has become entrenched and ostensibly running smoothly, there still could be serious problems with lecturers' understanding and acceptance of the change. If research were to continue where this thesis finishes, when the dissemination process seems to be well under control, and explore what is going on in the Horticulture classrooms in 1995, for instance, misconceptions about the meaning of the new syllabus documents still might be discovered. This is less likely in the light of the dissemination project, but unexpected and emotional response is part of the problem of change, and knowledge of this kind would be most valuable.

The research methods used in this research also offer scope for further research. The combination of three distinct methodologies in three research stages was useful in the given circumstances, where the data from one stage were used to develop the next. The reason for beginning with exploratory case studies using interviews was that so little was known about the curriculum dissemination process in TAFE in Western Australia. Possibly, basic exploratory research would not be needed again in this situation, but would provide a valuable starting point for research in any area where very little research has occurred.

The *preferred* and *actual* situation questionnaire was a useful measurement tool, but the version used in this study needs to be modified and further tested to overcome the

response error described in Chapter 3. With growing local interest in the *preferred* and *actual* situation research instrument, and the possibility of a collection of its uses being compiled in the future (G. Dellar, personal communication, April, 1994), it would be appropriate to fine tune this version and use it again. Experimental research into the effect of sample size might also be useful.

The application and observation of the strategy was an interesting and personally satisfying research method, but it required more time and researcher participation than had been anticipated. This could be better planned for if it were to be used in a similar situation again. The Horticulture Study Area Leader has expressed a desire that the researcher speak to a regional meeting about the stages of the strategy, so that rural staff become aware of its place in the change process, and learn to apply it for themselves. As a research method, it would be useful to develop and use again.

Conclusion

This thesis presents evidence that dissemination processes are not given sufficient attention in the TAFE sector and are creating unnecessary disruption to lecturers in the upgrading and renewal of curricula. It is contended that dissemination is central to the curriculum change process and must be given serious attention if TAFE lecturers are to perform their jobs professionally and efficiently.

Dissemination is defined as the “process of *informing* teachers about new or revised curriculum ideas, so that they *understand* and *accept* the innovation”. This implies that lecturers are informed about prospective change by management, or an agent representing management, that they understand the change in terms of their own meaning and culture and that they accept it as worthwhile to pass onto their students. It requires a compromise between existing top-down management structures and bottom-up lecturer collaboration and participation if the process is to succeed.

The thesis suggests a way in which this compromise could be made by the appointment to each curriculum project of a trained ‘change agent’, who works with both management and lecturer implementers and applies the strategy of change which has been tested as part of this research.

Attention to a well-developed strategy of curriculum dissemination is particularly important at this stage of restructuring and reform, when TAFE lecturers are experiencing greater than usual frustration and demoralisation in the face of systemic, educational and industry initiated change. However, it is contended that the dissemination strategy is in itself essential to any curriculum change process and should become a part of the systemic approach to all change management at any time and in any circumstances.

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Appendices A1 - A2: The pilot study

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Appendix A1: Semi-structured interview schedule for users of new curriculum

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Curriculum dissemination is the process of informing teachers about a new curriculum so that they understand and accept it before they have to use it. It might include strategies such as involving teachers in development, users participating in trials, staff development activities or even formal marketing strategies.

1. Had you known that a new curriculum was being developed?
   What had you heard?
   Were you involved?
   Did you want to be involved?

2. How did formal information about the curriculum reach you? Describe the strategies.

   - staff development
   - skills training
   - meetings
   - planning the implementation
   - resources development
   - feedback role during pilot

3. Did these strategies help you

   - to understand the curriculum
   - to accept the curriculum
   - give you enough time to plan how you were going to use it?

4. Who played the most significant role in helping you to understand and accept the curriculum?

   - Principal?
   - Study Area Leader?
   - Head of Department?
   - Someone else?

   Describe the role played.

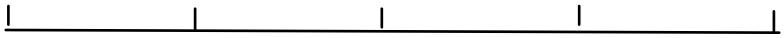
5. When you began implementing the curriculum did you experience negative/positive feelings? Describe them.

sense of ownership	sense of isolation
participation	lack of communication
well planned	time delays
students responded well	too complex
good support	students suffered
good resources	resources had to be produced

6. How useful do you think each of these dissemination strategies might have been in helping you overcome any problems you had?

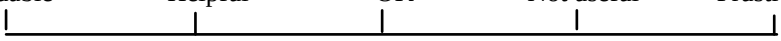
- staff development
- skills training
- meetings
- planning the implementation
- resources development
- feedback role during pilot

Invaluable Helpful OK Not useful Frustrating



7. Rate the usefulness of the dissemination process overall.

Invaluable Helpful OK Not useful Frustrating



8. What suggestions would you make for improving the dissemination process if it were to happen again?

9. Would you mind if we contacted you later should we wish to collect more detailed information next year?

10. If not, please include your name, position, college and telephone number on this interview tape.

Appendix A2: Semi-structured interview schedule for curriculum development officers and Study Area Leaders

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Curriculum dissemination is the process of informing teachers about a new curriculum so that they understand and accept it before they have to use it. It might include strategies such as involving teachers in development, users participating in trials, staff development activities or even formal marketing strategies.

1. What curriculum projects have you been involved in during the last two (or three) years? [Specify exactly which project is being discussed in this interview]

2. What did you see as your role in these projects?

3. Please describe how curriculum dissemination occurred in the project(s) under discussion.

4. Which do you think were the most important strategies?

5. Do you think they were successful (enough)?

6. How might you change these strategies if you had to do it again?

7. Would you mind if we contacted you later should we wish to collect more detailed information next year?

8. If not, please include your name, position, place of work and contact telephone number on the interview tape.

Appendices B1 - B8: The trial data

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Appendix B1: Draft dissemination questionnaire: Preferred and actual situations

Curriculum dissemination: Preferred situation

In the ideal situation how important would you consider each of the following characteristics of curriculum dissemination? Give your answer on the scale of 1 to 5, where 1 is the most important and 5 is the least.

		most important	**1**	**2**	**3**	**4**	**5**	least important
1.	**Information on curriculum development**							
	How important is it that lecturers be informed about							
1.1	major innovation or review about to begin in their study area		[ ]	[ ]	[ ]	[ ]	[ ]	
1.2	minor revision being planned in their study area		[ ]	[ ]	[ ]	[ ]	[ ]	
1.3	minor revisions being planned in their subject area		[ ]	[ ]	[ ]	[ ]	[ ]	
1.4	who the Project Director is		[ ]	[ ]	[ ]	[ ]	[ ]	
1.5	who the curriculum officer is		[ ]	[ ]	[ ]	[ ]	[ ]	
1.6	which senior TAFE staff are involved		[ ]	[ ]	[ ]	[ ]	[ ]	
1.7	who the members of industry advisory committees are		[ ]	[ ]	[ ]	[ ]	[ ]	
1.8	the methods and progress of the needs analysis		[ ]	[ ]	[ ]	[ ]	[ ]	
1.9	the results of the needs analysis		[ ]	[ ]	[ ]	[ ]	[ ]	
1.10	design decisions (shape and structure of course)		[ ]	[ ]	[ ]	[ ]	[ ]	
1.11	changes in content planned for new course		[ ]	[ ]	[ ]	[ ]	[ ]	
1.12	educational changes planned for course (methods, delivery, entry and exit points, etc)		[ ]	[ ]	[ ]	[ ]	[ ]	
1.13	completed accreditation documents		[ ]	[ ]	[ ]	[ ]	[ ]	
1.14	registration procedures and results		[ ]	[ ]	[ ]	[ ]	[ ]	
1.16	who is developing the subject syllabuses		[ ]	[ ]	[ ]	[ ]	[ ]	
1.17	who is developing other resources		[ ]	[ ]	[ ]	[ ]	[ ]	
1.18	plans for new equipment and materials		[ ]	[ ]	[ ]	[ ]	[ ]	
1.19	plans for staffing, student market, funding etc.		[ ]	[ ]	[ ]	[ ]	[ ]	
1.20	when the new course is planned to begin		[ ]	[ ]	[ ]	[ ]	[ ]	
2.	**Involvement in curriculum development**							
	How important is it that lecturing staff be invited to							
2.1	give input to the needs analysis		[ ]	[ ]	[ ]	[ ]	[ ]	
2.2	comment on the results of the needs analysis		[ ]	[ ]	[ ]	[ ]	[ ]	
2.3	communicate with industry working group		[ ]	[ ]	[ ]	[ ]	[ ]	
2.4	communicate with development team on industry matters		[ ]	[ ]	[ ]	[ ]	[ ]	
2.5	communicate with Project Director expressing interest in the project		[ ]	[ ]	[ ]	[ ]	[ ]	
2.6	participate in decision making about the design and structure of the course		[ ]	[ ]	[ ]	[ ]	[ ]	
2.7	participate in decision making about the objectives of the course		[ ]	[ ]	[ ]	[ ]	[ ]	

2.8	participate in discussion of documents before accreditation and give input	[ ]	[ ]	[ ]	[ ]	[ ]
2.9	participate in syllabus writing (especially objectives)	[ ]	[ ]	[ ]	[ ]	[ ]
2.10	discuss completed syllabus documents and give input	[ ]	[ ]	[ ]	[ ]	[ ]
2.11	volunteer for participation in resource development	[ ]	[ ]	[ ]	[ ]	[ ]

3. Complexity of project

	How important is it that					
3.1	curriculum change be introduced slowly	[ ]	[ ]	[ ]	[ ]	[ ]
3.2	change occur in small steps	[ ]	[ ]	[ ]	[ ]	[ ]
3.3.	one feature of change be introduced at a time (eg, new content, new educational ideas, new structures, etc.)	[ ]	[ ]	[ ]	[ ]	[ ]
3.4	change should be introduced all at once as one large innovation and dealt with all together	[ ]	[ ]	[ ]	[ ]	[ ]

4. Resource development

	How important is it that					
4.1	the curriculum team develop resources and teaching materials	[ ]	[ ]	[ ]	[ ]	[ ]
4.2	lecturers be given time off teaching to develop teaching materials for the team	[ ]	[ ]	[ ]	[ ]	[ ]
4.3	lecturers nominate someone from their study area to develop teaching materials	[ ]	[ ]	[ ]	[ ]	[ ]
4.4	lecturers develop their own materials using the completed syllabus documents	[ ]	[ ]	[ ]	[ ]	[ ]
4.5	lecturers have a chance to see and discuss other people's teaching materials	[ ]	[ ]	[ ]	[ ]	[ ]
4.6	common resource materials be developed in conjunction with TES	[ ]	[ ]	[ ]	[ ]	[ ]

5. Staff development

	How important is it that					
5.1	lecturers be kept informed in writing of all major decisions throughout the development process	[ ]	[ ]	[ ]	[ ]	[ ]
5.2	staff development meetings be held throughout the development process to discuss the major decisions	[ ]	[ ]	[ ]	[ ]	[ ]
5.3	staff development meetings be able to change the accreditation documents at the appropriate time	[ ]	[ ]	[ ]	[ ]	[ ]
5.4	Staff development meetings be held after accreditation so that they can discuss the new documents	[ ]	[ ]	[ ]	[ ]	[ ]
5.5	Staff development meetings be able to change the syllabus documents	[ ]	[ ]	[ ]	[ ]	[ ]
5.6	staff development meetings devise an implementation plan	[ ]	[ ]	[ ]	[ ]	[ ]
5.7	staff development meetings be devoted to any new skills development necessary	[ ]	[ ]	[ ]	[ ]	[ ]

5.8	some staff development meetings include the members of the development team	[ ]	[ ]	[ ]	[ ]	[ ]
5.9	some staff development meetings include members of the industry advisory group	[ ]	[ ]	[ ]	[ ]	[ ]
5.10	The minutes of staff development meetings be taken and made available to all involved in development and implementation	[ ]	[ ]	[ ]	[ ]	[ ]

6. Formative evaluation and feedback on implementation

	How important is it that lecturers be invited to					
6.1	collect feedback from students	[ ]	[ ]	[ ]	[ ]	[ ]
6.2	collect feedback from employers of students	[ ]	[ ]	[ ]	[ ]	[ ]
6.3	collect data of their own experiences and opinions about teaching the course	[ ]	[ ]	[ ]	[ ]	[ ]
6.4	attend staff meetings to share and discuss data	[ ]	[ ]	[ ]	[ ]	[ ]
6.5	attend meetings with senior staff to give feedback	[ ]	[ ]	[ ]	[ ]	[ ]
6.6	attend meeting with curriculum team to give feedback	[ ]	[ ]	[ ]	[ ]	[ ]
6.7	attend meeting with industry group to give feedback	[ ]	[ ]	[ ]	[ ]	[ ]

Comments

(Space for comments included here)

Curriculum dissemination: Actual situation

Think of an occasion where you had to cope with a new or revised course or subject being developed in your study area. Answer this questionnaire to describe on the scale of 1 to 5, how important each of these factors was in this particular project. Give your answer on the scale of 1 to 5, where 1 is the most important and 5 is the least.

	most important	**1**	**2**	**3**	**4**	**5**	least important

1. Information on curriculum development

	How important was it that lecturers were informed about					
1.1	major innovation or review beginning in your study area	[ ]	[ ]	[ ]	[ ]	[ ]
1.2	minor revision being planned in your study area	[ ]	[ ]	[ ]	[ ]	[ ]
1.3	revisions being planned in your subject area	[ ]	[ ]	[ ]	[ ]	[ ]
1.4	who the Project Director was	[ ]	[ ]	[ ]	[ ]	[ ]
1.5	who the curriculum officer was	[ ]	[ ]	[ ]	[ ]	[ ]
1.6	which senior TAFE staff were involved	[ ]	[ ]	[ ]	[ ]	[ ]
1.7	who the members of industry advisory group were	[ ]	[ ]	[ ]	[ ]	[ ]
1.8	the methods and progress of the needs analysis	[ ]	[ ]	[ ]	[ ]	[ ]
1.9	the results of the needs analysis	[ ]	[ ]	[ ]	[ ]	[ ]
1.10	design decisions (shape and structure of course)	[ ]	[ ]	[ ]	[ ]	[ ]
1.11	changes in content planned for new course	[ ]	[ ]	[ ]	[ ]	[ ]

1.12	educational changes planned for course (methods, delivery, entry and exit points, etc)	[ ]	[ ]	[ ]	[ ]	[ ]
1.13	completed accreditation documents	[ ]	[ ]	[ ]	[ ]	[ ]
1.14	registration procedures and results	[ ]	[ ]	[ ]	[ ]	[ ]
1.15	who was developing the subject syllabuses	[ ]	[ ]	[ ]	[ ]	[ ]
1.15	who was developing other resources	[ ]	[ ]	[ ]	[ ]	[ ]
1.15	plans for new equipment and materials	[ ]	[ ]	[ ]	[ ]	[ ]
1.16	plans for staffing, student market, funding etc.	[ ]	[ ]	[ ]	[ ]	[ ]
1.17	when the new course was planned to begin	[ ]	[ ]	[ ]	[ ]	[ ]

2. Involvement in curriculum development

	How important was it that you were invited to					
2.1	give input to the needs analysis	[ ]	[ ]	[ ]	[ ]	[ ]
2.2	comment on the results of the needs analysis	[ ]	[ ]	[ ]	[ ]	[ ]
2.3	communicate with industry working group	[ ]	[ ]	[ ]	[ ]	[ ]
2.4	communicate with development team on industry matters	[ ]	[ ]	[ ]	[ ]	[ ]
2.5	communicate with Project Director expressing interest in the project	[ ]	[ ]	[ ]	[ ]	[ ]
2.6	participate in decision making about the design and structure of the course	[ ]	[ ]	[ ]	[ ]	[ ]
2.7	participate in decision making about the objectives of the course	[ ]	[ ]	[ ]	[ ]	[ ]
2.8	participate in discussion of documents before accreditation and give input	[ ]	[ ]	[ ]	[ ]	[ ]
2.9	participate in syllabus writing (especially objectives)	[ ]	[ ]	[ ]	[ ]	[ ]
2.10	discuss completed syllabus documents and give input	[ ]	[ ]	[ ]	[ ]	[ ]
2.11	volunteer for participation in resource development	[ ]	[ ]	[ ]	[ ]	[ ]

3. Complexity of project

	How important was it that					
3.1	curriculum change was introduced slowly	[ ]	[ ]	[ ]	[ ]	[ ]
3.2	change occurred in small steps over several years	[ ]	[ ]	[ ]	[ ]	[ ]
3.3.	one feature of change was introduced at a time (new content, new educational ideas, new structures, etc.)	[ ]	[ ]	[ ]	[ ]	[ ]
3.4	change was introduced all at once as one large innovation and dealt with all together	[ ]	[ ]	[ ]	[ ]	[ ]

4. Resource development

	How important was it that					
4.1	the curriculum team developed resources and teaching materials	[ ]	[ ]	[ ]	[ ]	[ ]
4.2	you were given time off teaching to develop teaching materials for the team	[ ]	[ ]	[ ]	[ ]	[ ]
4.3	you nominated someone from your study area to develop teaching materials	[ ]	[ ]	[ ]	[ ]	[ ]

4.4	you developed your own materials using the completed syllabus documents	[ ]	[ ]	[ ]	[ ]	[ ]
4.5	you saw and discussed other people's teaching materials	[ ]	[ ]	[ ]	[ ]	[ ]
4.6	common resource materials were developed in conjunction with TES	[ ]	[ ]	[ ]	[ ]	[ ]

5. Staff development

How important was it that

5.1	you were kept informed in writing of all major decisions throughout the development process	[ ]	[ ]	[ ]	[ ]	[ ]
5.2	staff development meetings were held throughout the development process to discuss the major decisions	[ ]	[ ]	[ ]	[ ]	[ ]
5.3	staff development meetings were able to change the accreditation documents at the appropriate time	[ ]	[ ]	[ ]	[ ]	[ ]
5.4	Staff development meetings were held after accreditation so that you could discuss the new documents	[ ]	[ ]	[ ]	[ ]	[ ]
5.5	Staff development meetings were able to change the syllabus documents	[ ]	[ ]	[ ]	[ ]	[ ]
5.6	staff development meetings devised an implementation plan	[ ]	[ ]	[ ]	[ ]	[ ]
5.7	staff development meetings were devoted to any new skills development necessary	[ ]	[ ]	[ ]	[ ]	[ ]
5.8	some staff development meetings included the members of the development team	[ ]	[ ]	[ ]	[ ]	[ ]
5.9	some staff development meetings included members of the industry advisory group	[ ]	[ ]	[ ]	[ ]	[ ]
5.10	The minutes of staff development meetings were taken and made available to all involved in development and implementation	[ ]	[ ]	[ ]	[ ]	[ ]

6. Formative evaluation and feedback on implementation

How important was it that you were invited to

6.1	collect feedback from students	[ ]	[ ]	[ ]	[ ]	[ ]
6.2	collect feedback from employers of students	[ ]	[ ]	[ ]	[ ]	[ ]
6.3	collect data of your own experiences and opinions about teaching the course	[ ]	[ ]	[ ]	[ ]	[ ]
6.4	attend staff meetings to share and discuss data	[ ]	[ ]	[ ]	[ ]	[ ]
6.5	attend meetings with senior staff to give feedback	[ ]	[ ]	[ ]	[ ]	[ ]
6.6	attend meeting with curriculum team to give feedback	[ ]	[ ]	[ ]	[ ]	[ ]
6.7	attend meeting with industry group to give feedback	[ ]	[ ]	[ ]	[ ]	[ ]

Comments:

(Space for comments included here)

Appendix B2: Group means and totals of trial data

(1 = most important; 5 = least important)

1. Information on curriculum development

	Preferred Situation					Actual Situation				
Question No *	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N=21	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N+21
1.1	1.3	1.0	1.0	1.0	1.1	3.5	1.3	1.6	2.0	2.3
1.2	1.8	1.8	2.6	1.5	2.0	3.8	2.3	2.8	2.0	3.0
1.3	1.9	2.2	2.6	1.5	2.1	4.0	1.6	2.8	2.5	2.9
1.4	2.3	2.7	2.4	1.5	2.3	4.4	2.5	3.2	1.0	3.2
1.5	2.3	2.3	2.6	1.5	2.3	3.8	2.7	3.2	1.0	3.0
1.6	2.1	1.8	2.6	1.5	2.1	4.0	2.3	2.8	1.0	3.0
1.7	3.0	1.8	2.4	2.0	2.4	4.3	3.0	3.6	2.5	3.6
1.8	2.1	2.0	2.8	1.5	2.2	4.3	3.0	2.8	3.5	3.5
1.9	1.4	2.3	1.8	1.5	1.8	4.1	2.5	3.0	3.5	3.3
1.10	1.8	1.5	2.0	1.5	1.7	4.1	2.5	3.0	3.0	3.3
1.11	1.8	1.3	1.0	1.0	1.4	4.1	2.0	2.6	2.0	3.0
1.12	1.4	1.3	1.4	1.0	1.3	4.3	1.8	2.6	2.5	3.0
1.13	2.1	2.8	2.8	1.0	2.4	4.4	2.5	3.2	2.5	3.4
1.14	3.0	2.8	3.5	1.0	2.9	4.7	2.8	3.4	2.0	3.6
1.15	2.6	2.4	2.6	1.5	2.5	4.0	2.7	2.8	2.0	3.1
1.16	2.4	2.3	3.0	1.5	2.4	4.0	2.3	3.0	3.0	3.2
1.17	1.6	1.5	2.4	1.5	1.8	3.1	2.0	3.6	2.5	2.9
1.18	1.8	3.0	3.0	1.5	2.4	3.8	3.0	3.2	2.5	3.3
1.19	1.5	1.5	2.4	1.0	1.7	2.9	1.7	2.0	1.0	2.1

2. Involvement in curriculum development

	Preferred Situation					Actual Situation				
Question No	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N=21	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N+21
2.1	1.6	1.5	1.8	1.0	1.6	3.6	2.2	2.6	2.5	2.9
2.2	2.0	1.5	1.8	1.0	1.7	4.4	2.7	2.8	3.0	3.4
2.3	2.3	2.0	2.6	1.5	2.2	4.3	2.8	3.0	3.0	3.5
2.4	2.3	2.0	2.2	1.0	2.0	4.3	2.7	3.0	3.0	3.4
2.5	1.9	2.8	3.6	1.0	2.5	4.3	3.3	3.2	3.0	3.7
2.6	1.5	2.3	2.6	1.5	2.0	4.1	1.8	2.6	2.5	3.0
2.7	2.0	2.3	2.2	1.5	2.1	4.1	2.0	2.0	2.5	2.9
2.8	1.5	2.2	3.2	1.5	2.1	3.8	3.0	3.0	2.0	3.2
2.9	2.0	2.3	2.6	1.5	2.2	4.0	2.3	2.6	3.0	3.1
2.10	1.5	1.8	2.0	1.5	1.7	3.8	2.0	3.0	2.5	3.0
2.11	2.3	2.8	2.8	1.5	2.5	4.1	3.0	3.6	3.0	3.6

* Refer to Appendix B1 for wording of questions

3. Complexity of project

	Preferred Situation					Actual Situation				
Question No	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N=21	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N+21
3.1	2.1	1.8	3.0	2.0	2.2	4.0	2.3	2.6	3.5	3.1
3.2	2.4	2.0	2.8	1.0	2.2	3.1	3.7	2.8	3.5	3.2
3.3	2.9	2.2	3.4	1.5	2.7	2.9	3.7	3.2	3.0	3.2
3.4	2.4	1.8	2.8	3.5	2.4	3.0	2.5	2.6	1.0	2.6

4. Resource development

	Preferred Situation					Actual Situation				
Question No	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N=21	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N+21
4.1	2.0	1.7	2.4	1.5	2.0	4.1	2.3	3.0	2.5	3.2
4.2	1.4	1.3	1.8	1.0	1.4	4.8	3.3	3.6	2.5	3.9
4.3	1.9	1.3	2.6	1.5	1.9	4.4	2.5	4.0	2.5	3.6
4.4	1.9	2.5	2.2	1.5	2.1	2.5	2.5	2.6	1.5	2.4
4.5	1.0	1.5	2.0	1.5	1.4	4.4	2.3	3.2	3.0	3.4
4.6	2.8	1.8	2.8	1.5	2.4	4.6	3.3	3.8	3.0	3.9

5. Staff development

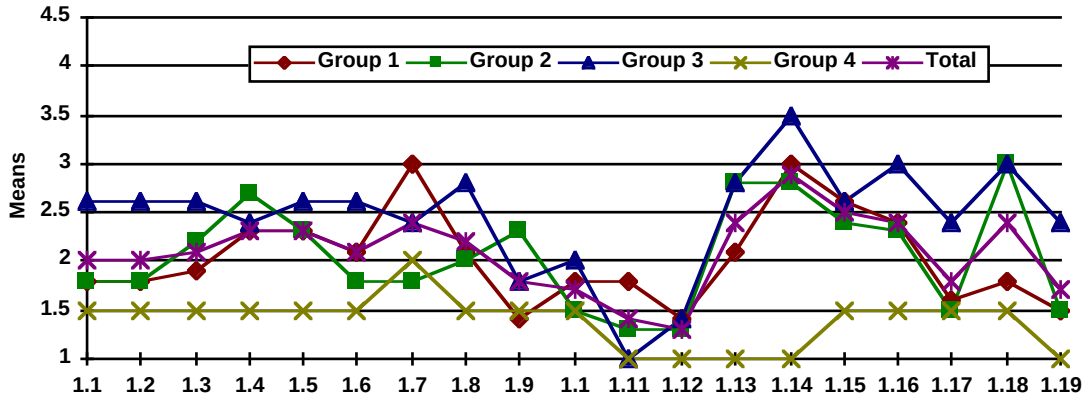
	Preferred Situation					Actual Situation				
Question No	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N=21	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N=21
5.1	2.3	2.2	3.0	1.5	2.3	4.5	2.2	3.8	2.0	3.5
5.2	1.4	1.8	2.6	1.0	1.8	4.4	2.3	2.2	2.5	3.1
5.3	2.1	1.5	2.8	1.5	2.0	4.6	2.8	3.0	1.5	3.5
5.4	1.9	1.5	1.8	1.5	1.7	4.4	2.8	3.4	1.0	3.5
5.5	1.4	2.2	1.6	1.5	1.7	3.9	3.3	2.4	2.5	3.2
5.6	1.5	2.2	1.8	1.5	1.8	3.8	3.5	2.2	3.0	3.2
5.7	1.5	2.0	2.0	1.5	1.8	4.1	3.5	3.6	3.0	3.8
5.8	1.9	1.7	2.0	1.0	1.8	4.3	2.7	3.2	3.0	3.5
5.9	1.8	2.3	2.2	1.0	2.0	4.5	3.2	3.8	3.0	3.9
5.10	1.4	2.3	2.8	1.0	2.0	4.1	3.2	4.0	3.0	3.8

6. Formative evaluation and feedback on implementation

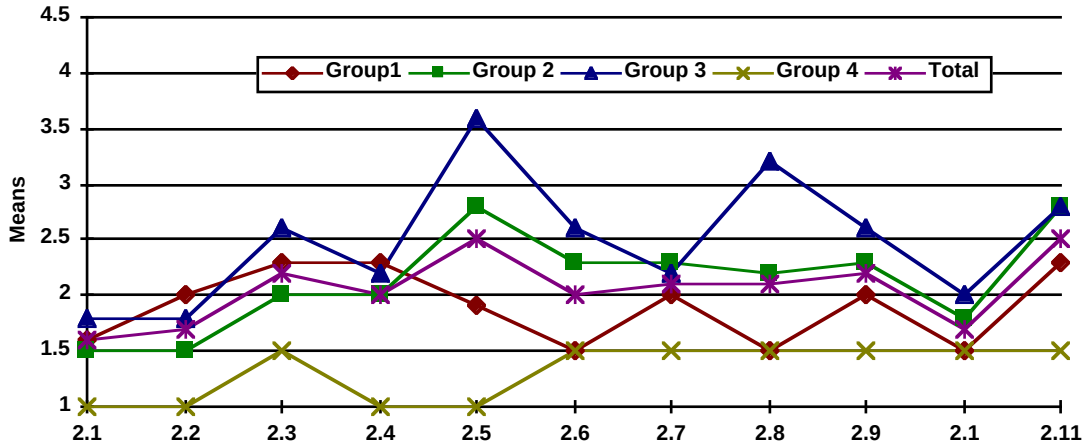
	Preferred Situation					**Actual Situation**				
Question No	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N+21	Group 1 Prefer-red first N=8	Group 2 Actual first N=6	Group 3 Prefer-red first N=5	Group 4 NonTAFE Pref first N=2	Total N=21
6.1	1.6	1.8	1.6	1.0	1.6	3.9	2.7	2.8	2.5	3.1
6.2	1.4	2.3	2.4	1.0	1.9	4.1	2.3	3.6	2.5	3.3
6.3	1.8	1.3	1.4	1.0	1.5	3.4	2.2	2.2	2.0	2.6
6.4	1.4	1.3	2.2	1.0	1.5	3.6	3.3	2.6	1.5	3.1
6.5	1.4	1.2	2.6	1.0	1.6	4.0	2.8	2.6	2.5	3.2
6.6	1.5	1.7	2.4	1.0	1.7	4.5	2.7	3.0	2.0	3.4
6.7	1.8	2.0	2.2	1.0	1.9	4.8	3.2	4.0	3.0	4.0

Appendix B3: Graphical representation of trial data: Group and total means *(1 = most important; 5 = least important)*

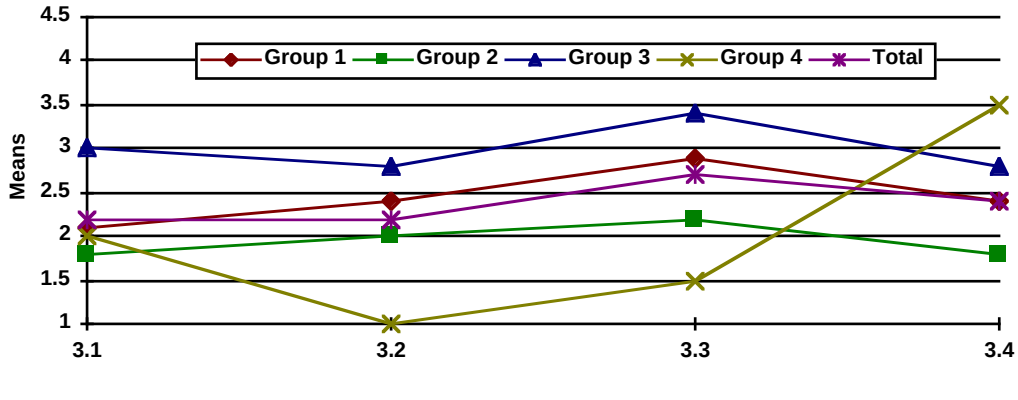
1. Information on curriculum development (*Preferred situation*)



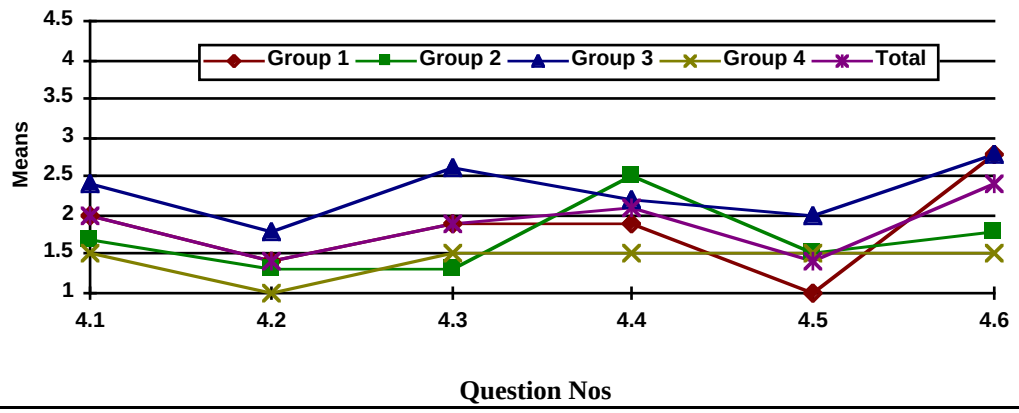
2. Involvement in curriculum development (*Preferred situation*)



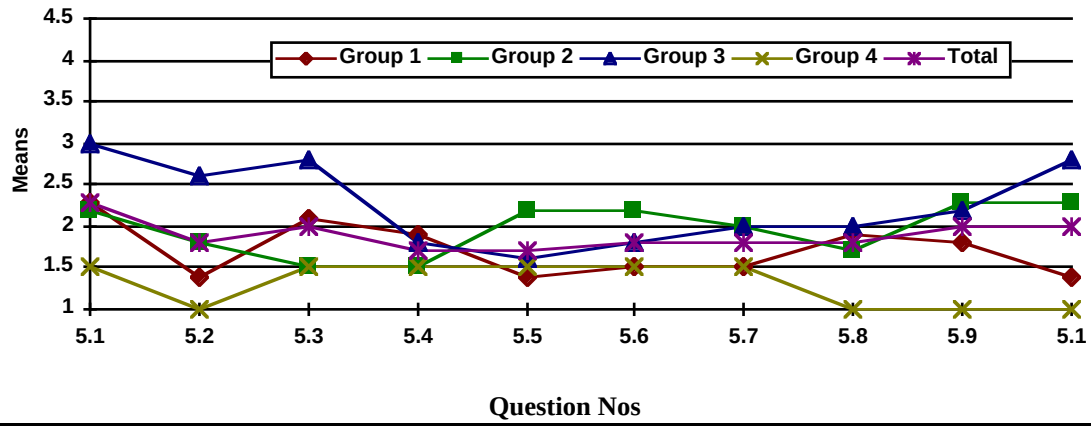
3. Complexity of project (*Preferred situation*)



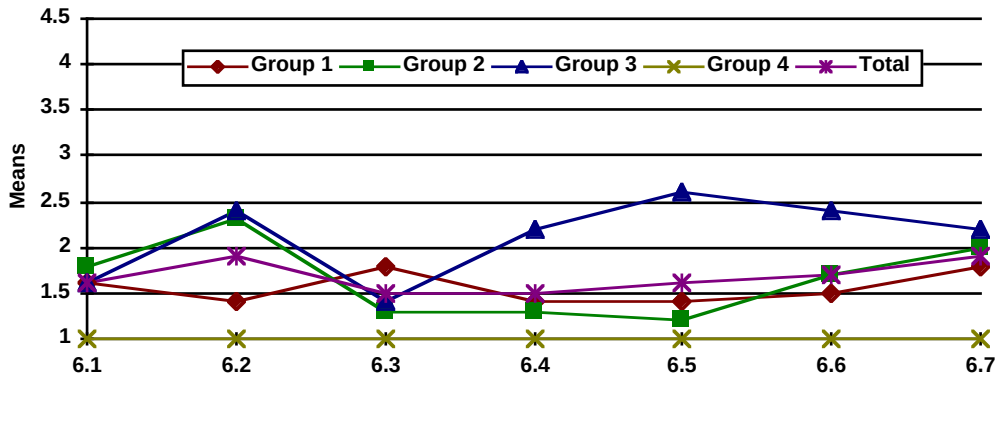
4. Resource development (*Preferred situation*)



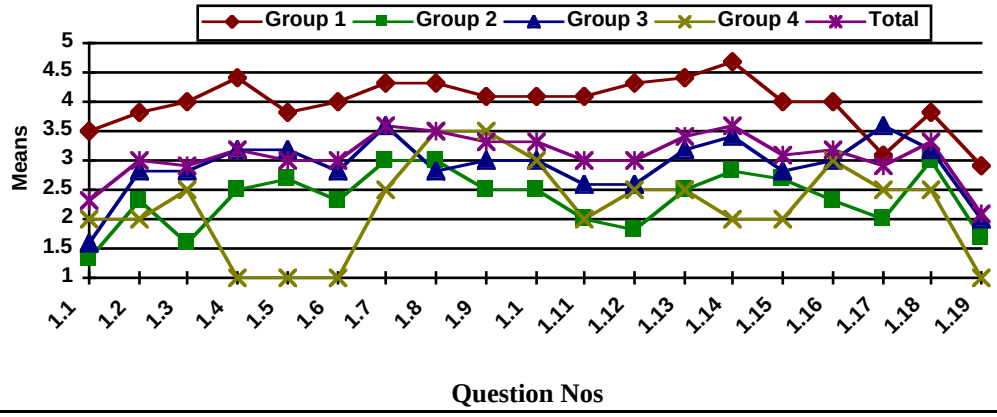
5. Staff development (*Preferred situation*)



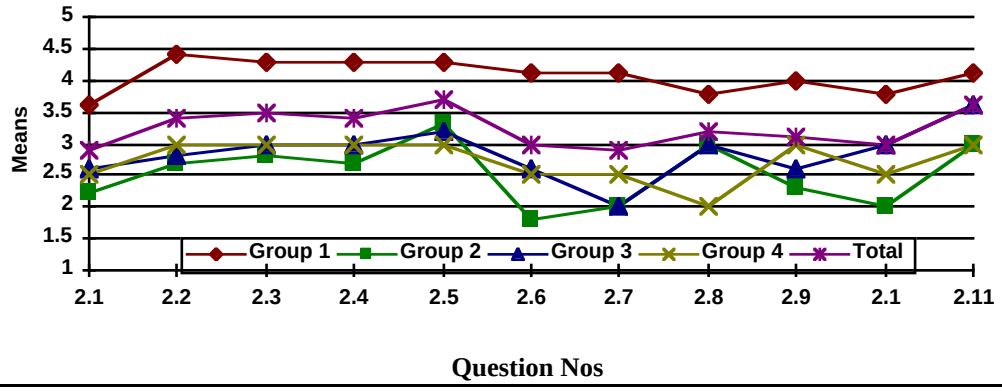
6. Formative evaluation and feedback on implementation (*Preferred situation*)



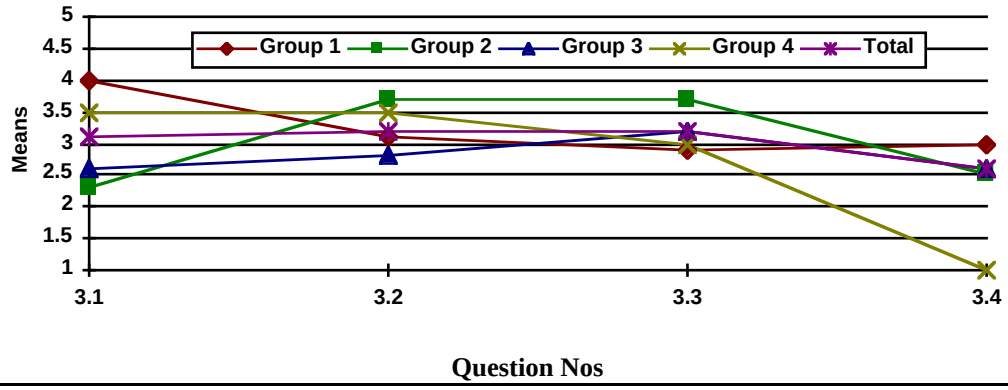
1. Information on curriculum development (*Actual situation*)



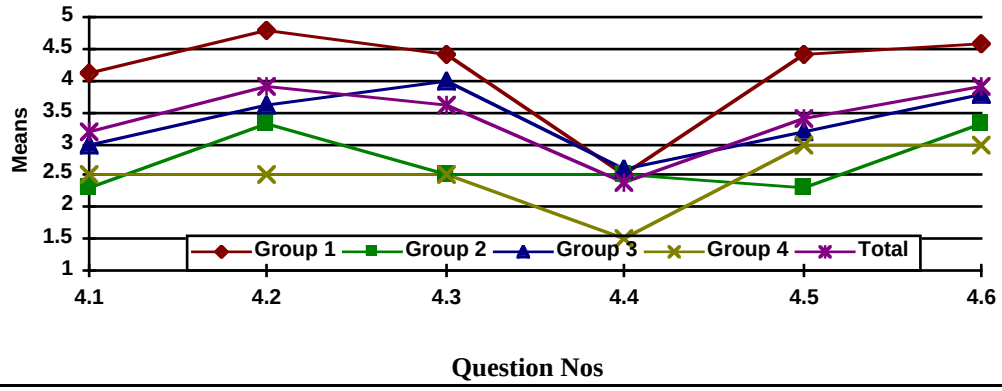
2. Involvement in curriculum development (*Actual situation*)



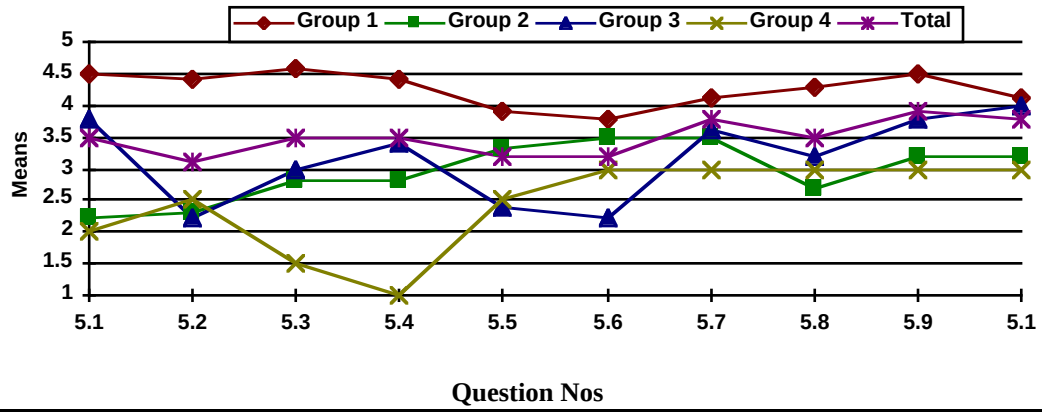
3. Complexity of project (*Actual situation*)



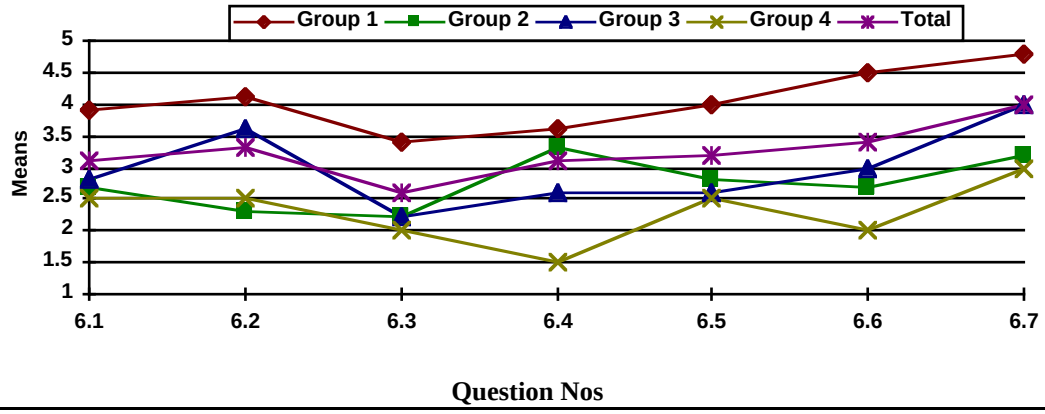
4. Resource development (*Actual situation*)



5. Staff development (*Actual situation*)

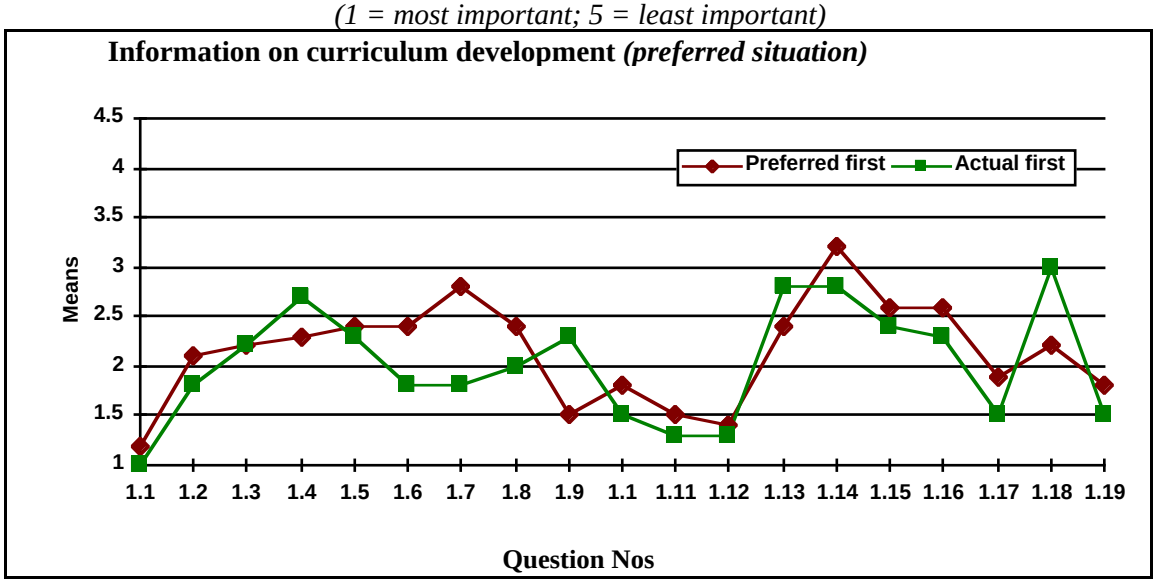


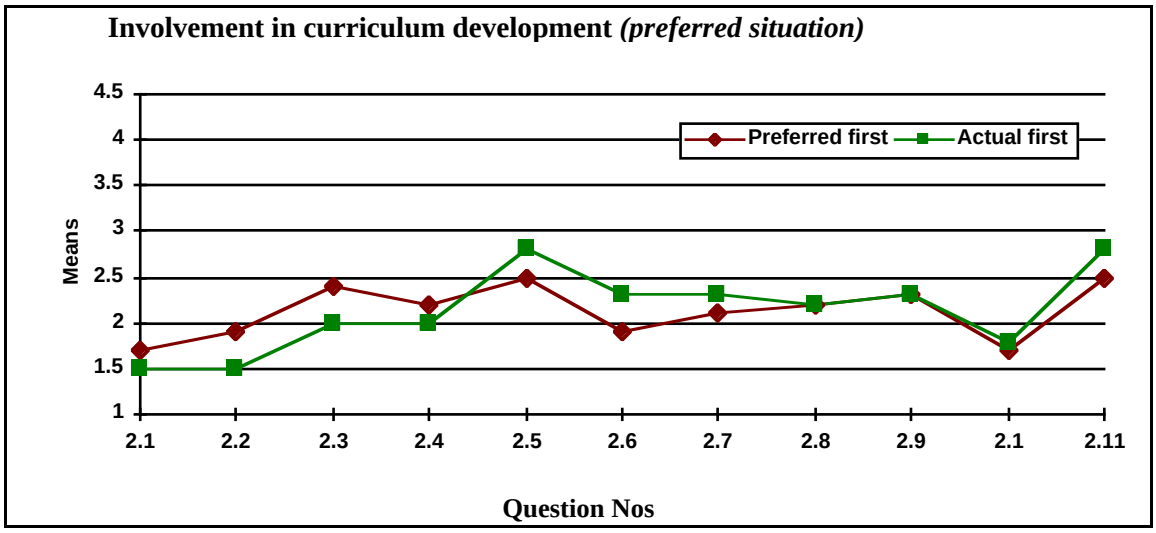
6. Formative evaluation and feedback on implementation (*Actual situation*)

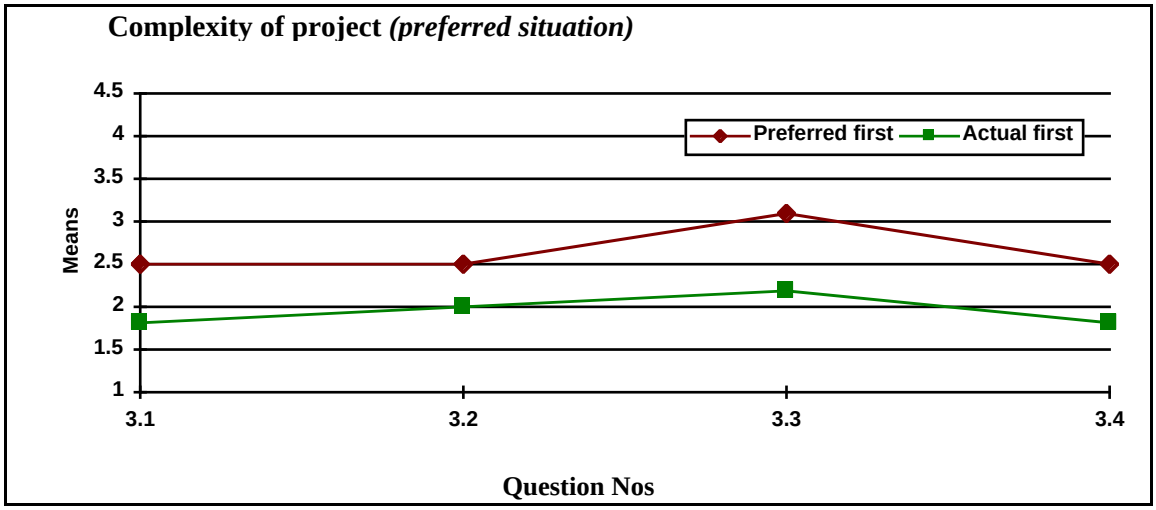


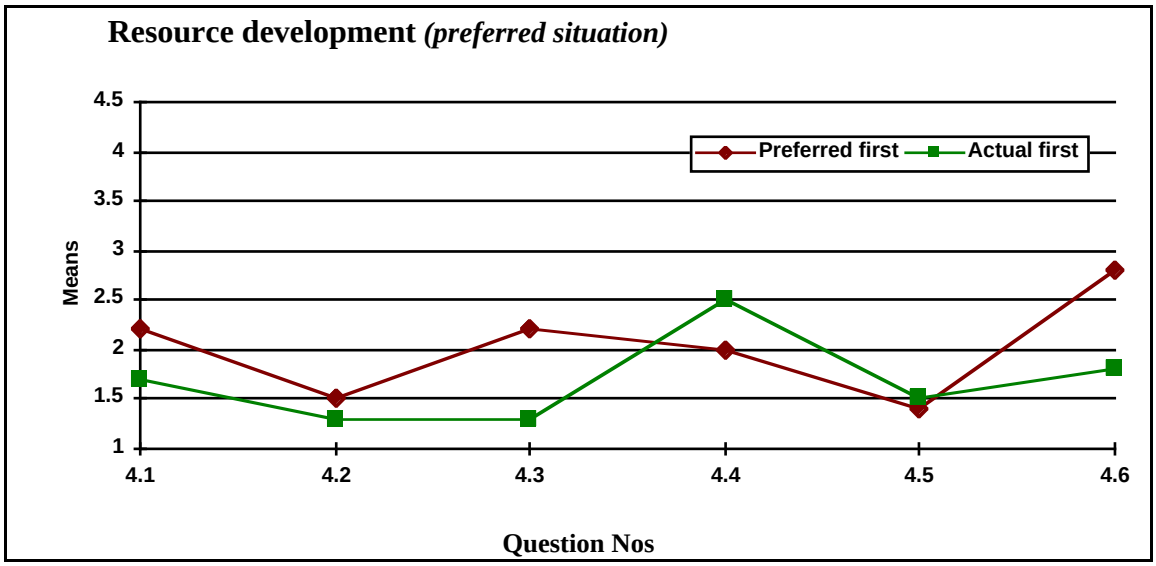
Appendix B4: Comparison of responses from lecturers responding to preferred situation first with those responding to actual situation first

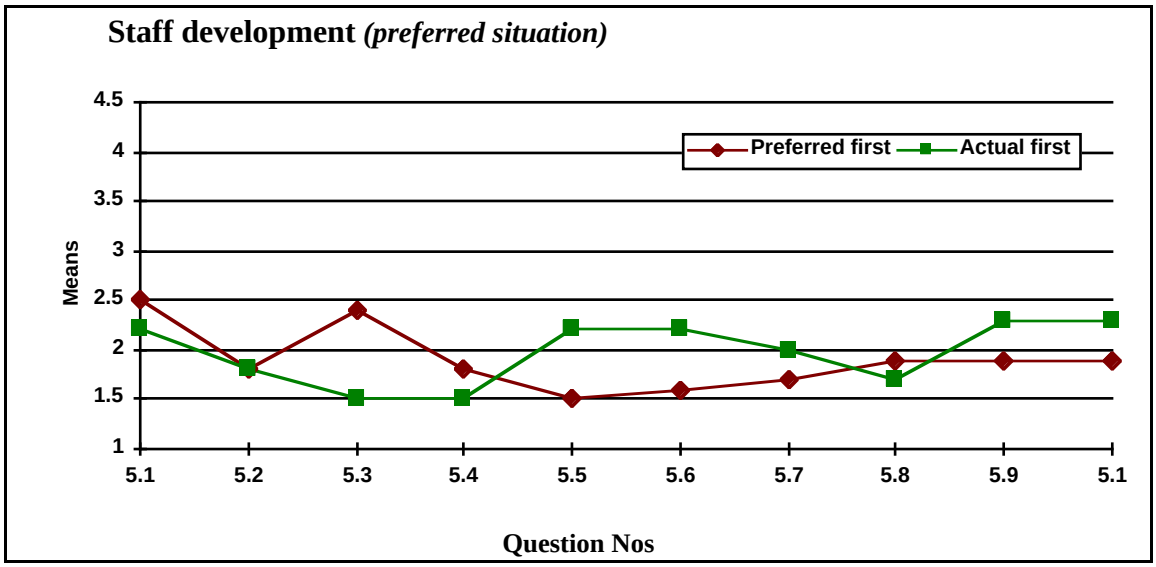
(1 = most important; 5 = least important)

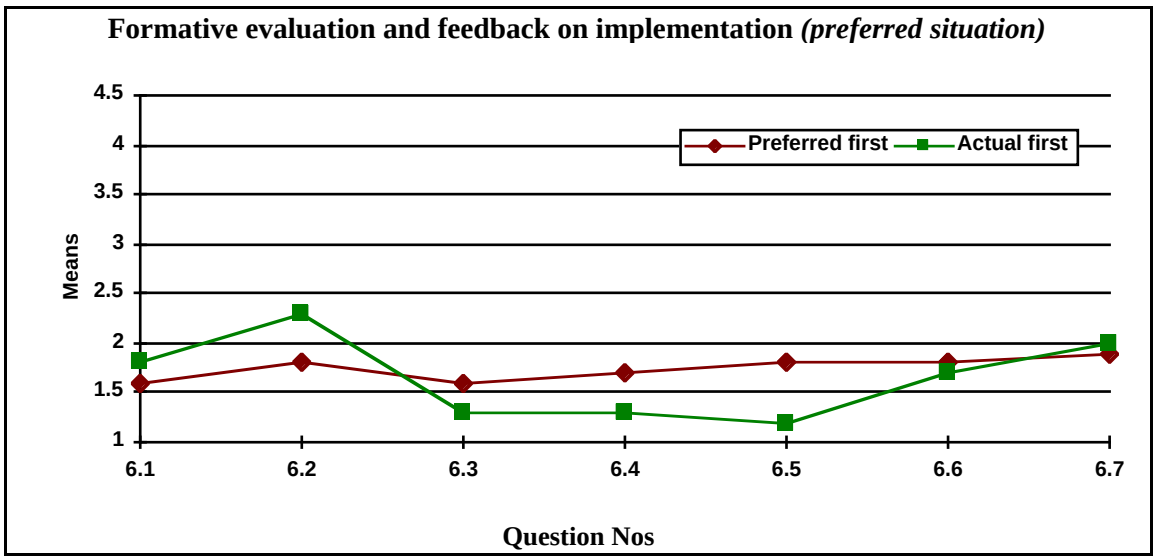


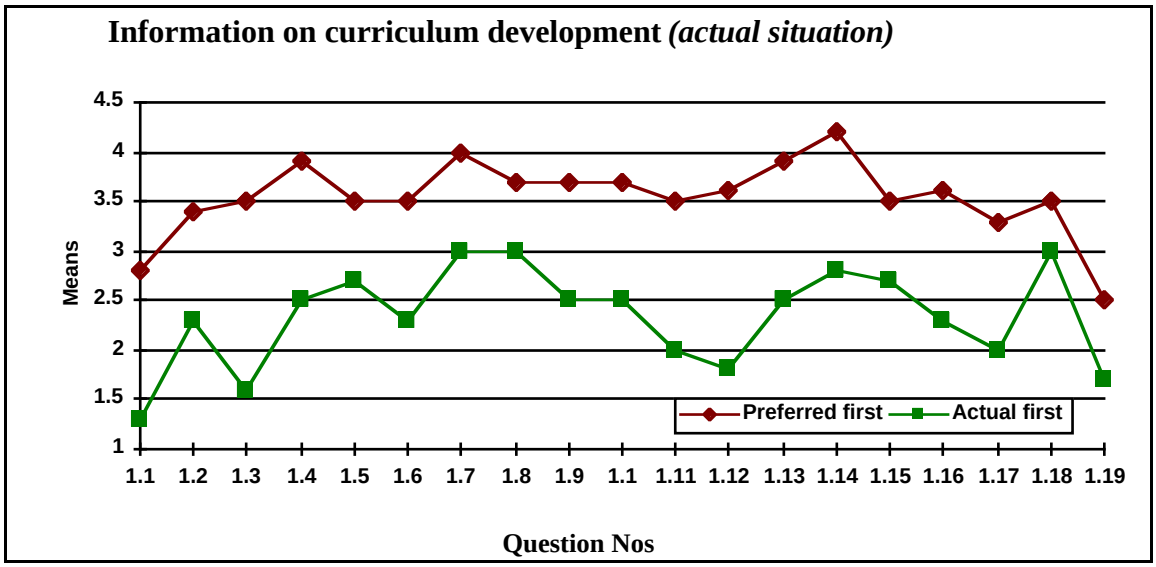


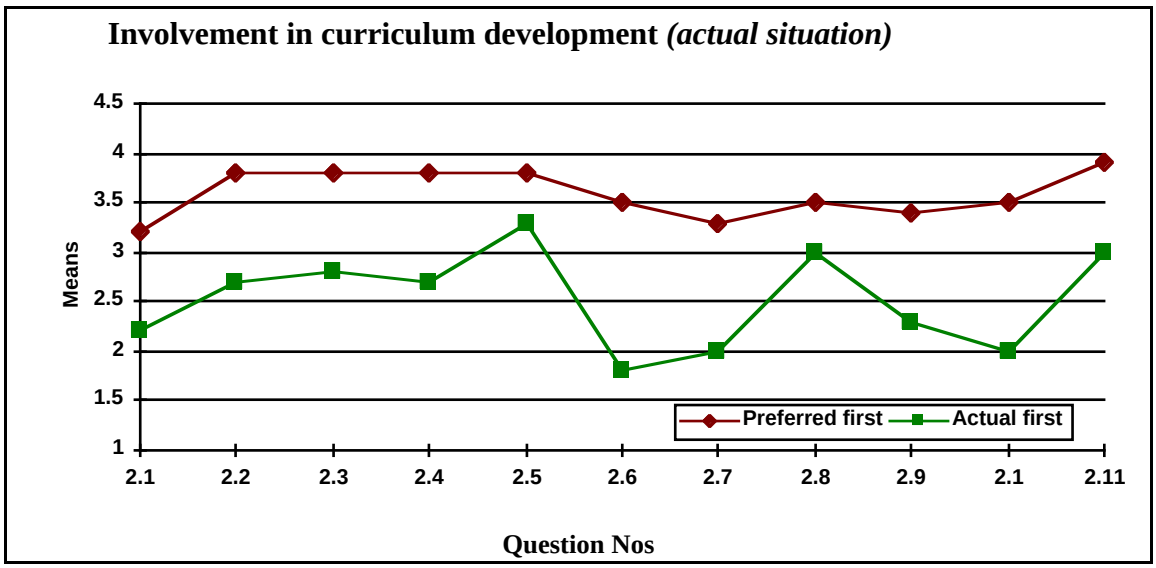


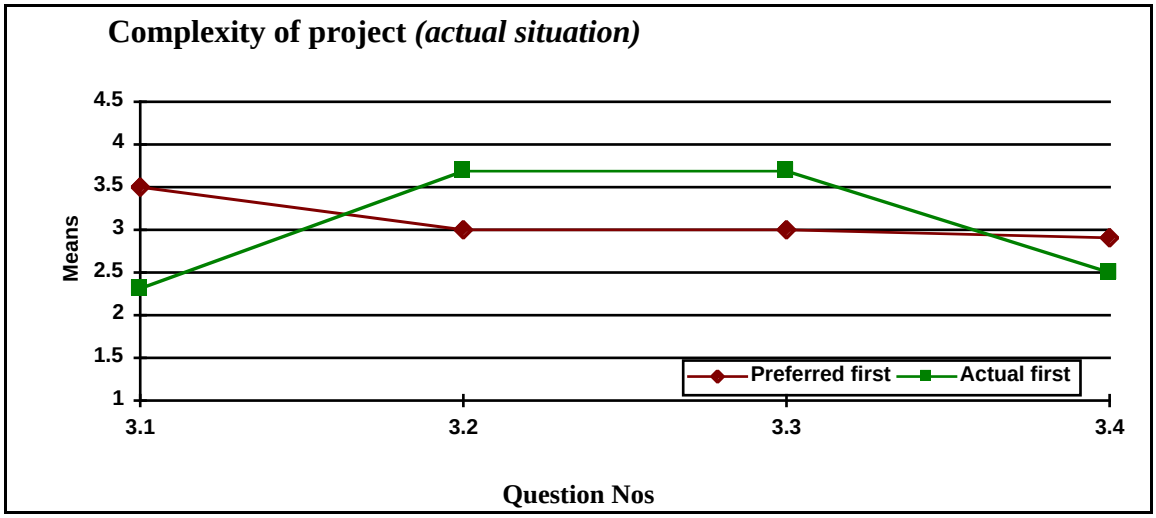

Resource development (preferred situation)
Preferred first
Actual first
Means
4.5
4
3.5
3
2.5
2
1.5
1
4.1
4.2
4.3
4.4
4.5
4.6
Question Nos

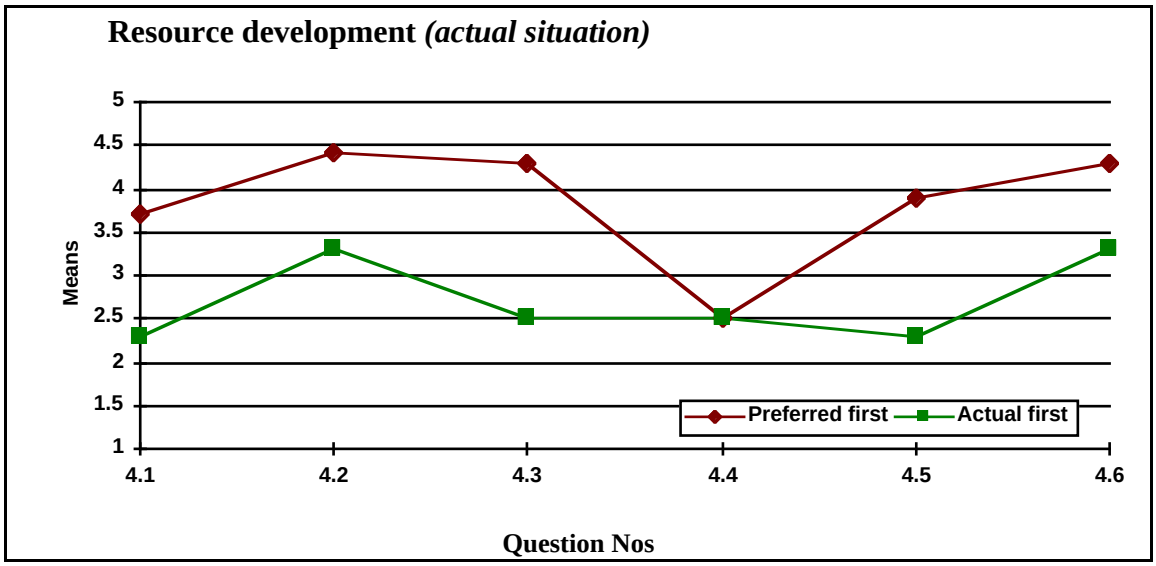

Staff development (preferred situation)
Preferred first
Actual first
Means
4.5
4
3.5
3
2.5
2
1.5
1
5.1
5.2
5.3
5.4
5.5
5.6
5.7
5.8
5.9
5.1
Question Nos

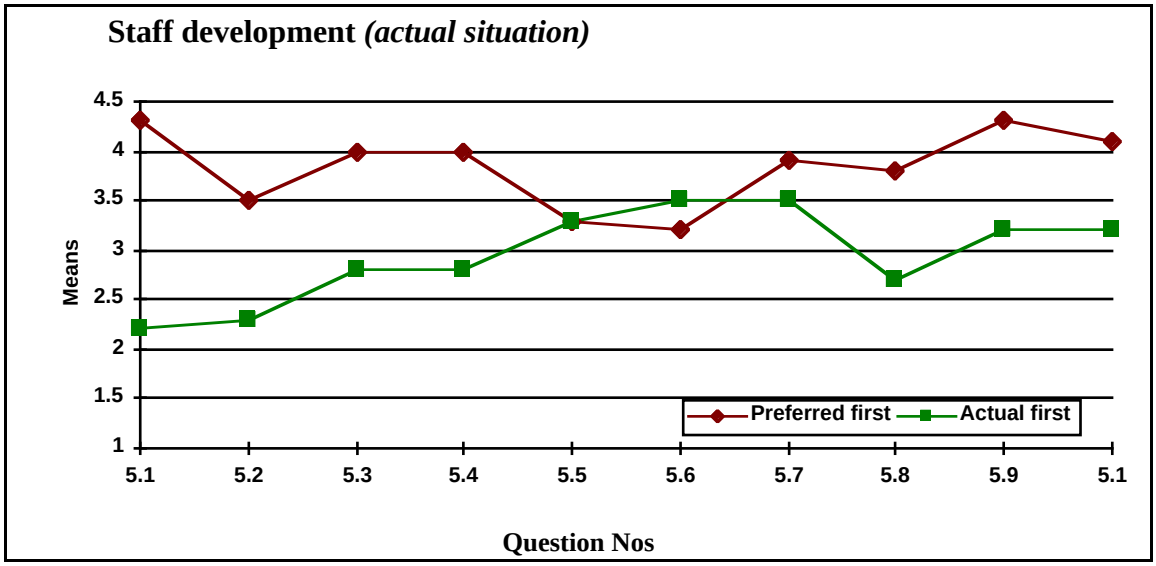

Formative evaluation and feedback on implementation (preferred situation)
Preferred first
Actual first
Means
4.5
4
3.5
3
2.5
2
1.5
1
6.1
6.2
6.3
6.4
6.5
6.6
6.7
Question Nos

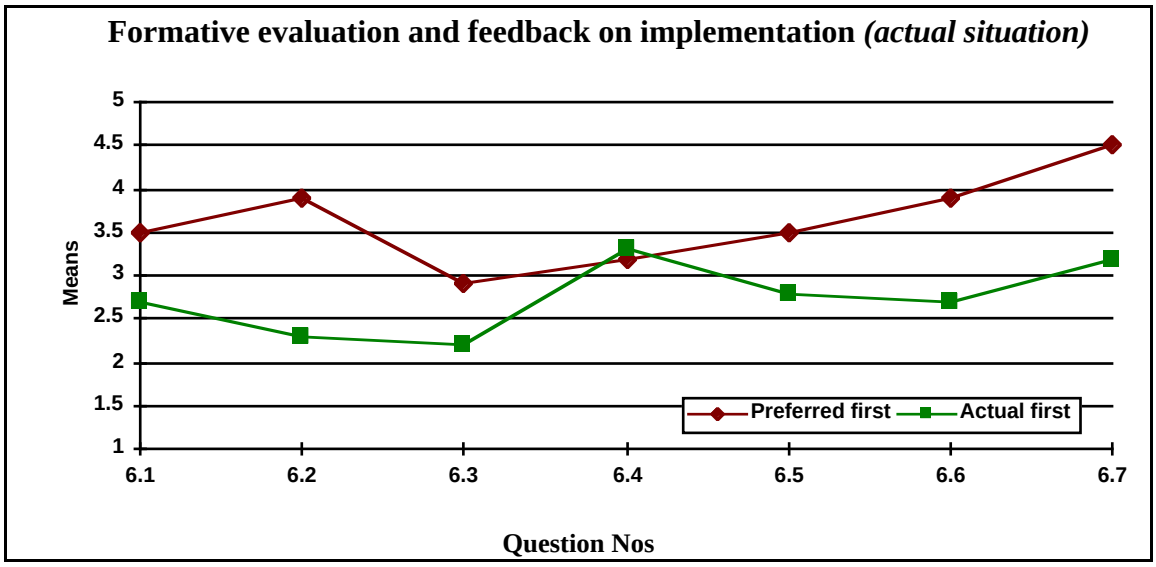

Information on curriculum development (actual situation)
Means
4.5
4
3.5
3
2.5
2
1.5
1
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.1 1.11 1.12 1.13 1.14 1.15 1.16 1.17 1.18 1.19
Preferred first
Actual first
Question Nos


Involvement in curriculum development (actual situation)
Means
4.5
4
3.5
3
2.5
2
1.5
1
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.1 2.11
Preferred first
Actual first
Question Nos


Complexity of project (actual situation)
Means
4.5
4
3.5
3
2.5
2
1.5
1
3.1 3.2 3.3 3.4
Preferred first
Actual first
Question Nos

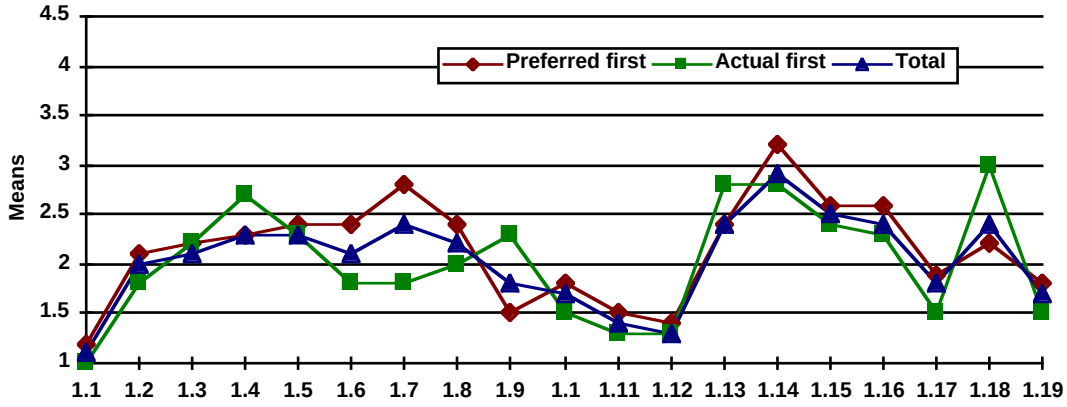

Resource development (actual situation)
Means
5
4.5
4
3.5
3
2.5
2
1.5
1
4.1
4.2
4.3
4.4
4.5
4.6
Preferred first
Actual first
Question Nos


Staff development (actual situation)
Means
4.5
4
3.5
3
2.5
2
1.5
1
5.1
5.2
5.3
5.4
5.5
5.6
5.7
5.8
5.9
5.1
Preferred first
Actual first
Question Nos

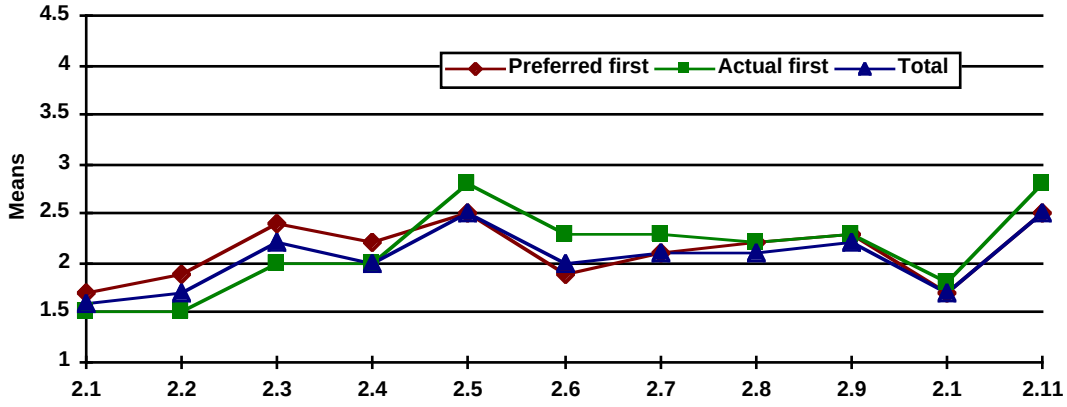

Formative evaluation and feedback on implementation (actual situation)
Means
5
4.5
4
3.5
3
2.5
2
1.5
1
6.1
6.2
6.3
6.4
6.5
6.6
6.7
Preferred first
Actual first
Question Nos

B5. Comparison of responses between those responding to preferred situation first, actual first and totals *(1 = most important; 5 = least important)*

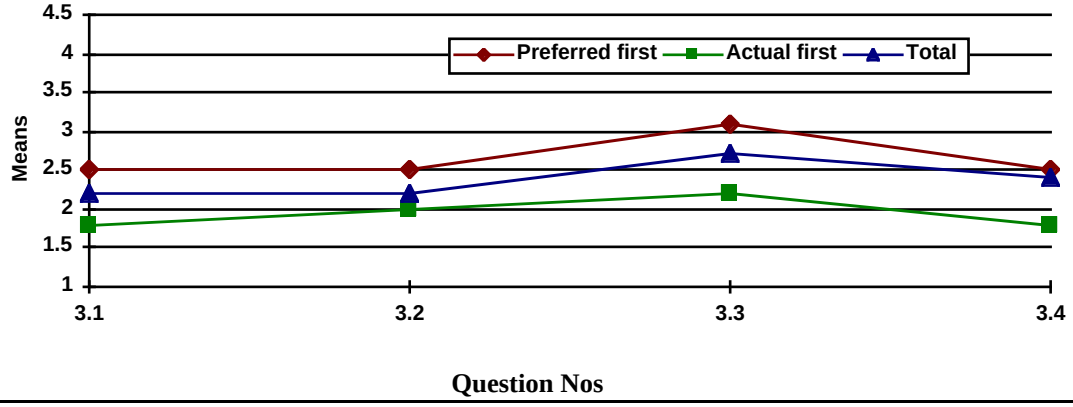
Information on curriculum development *(Preferred situation)*



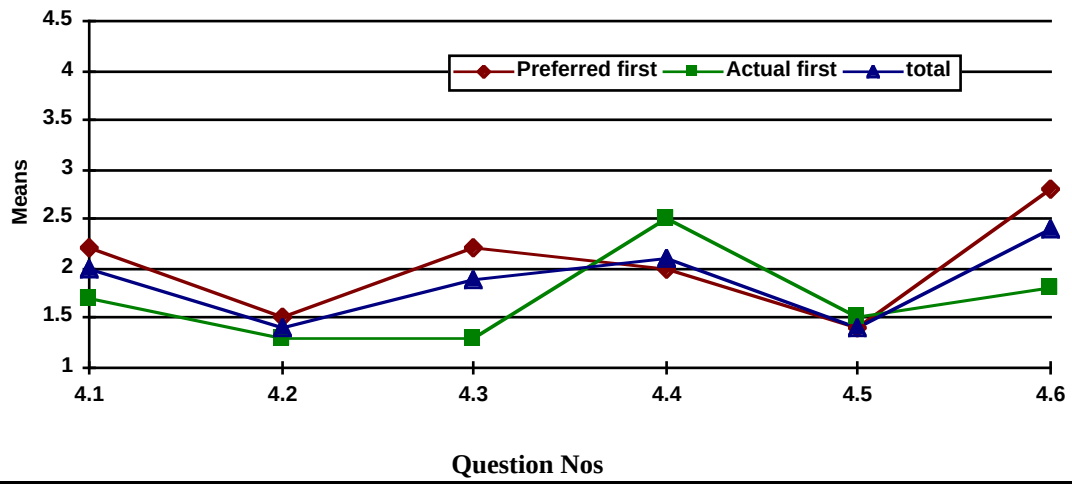
Involvement in curriculum development *(Preferred situation)*



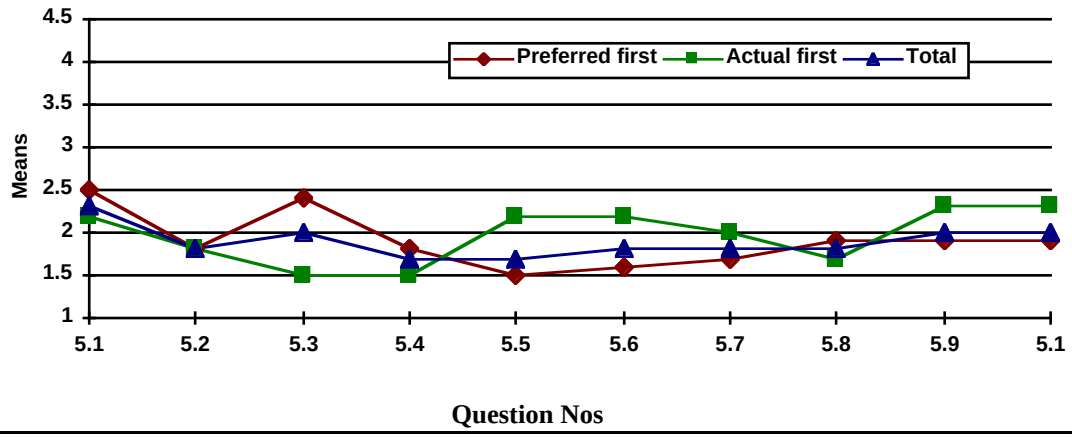
Complexity of project *(Preferred situation)*



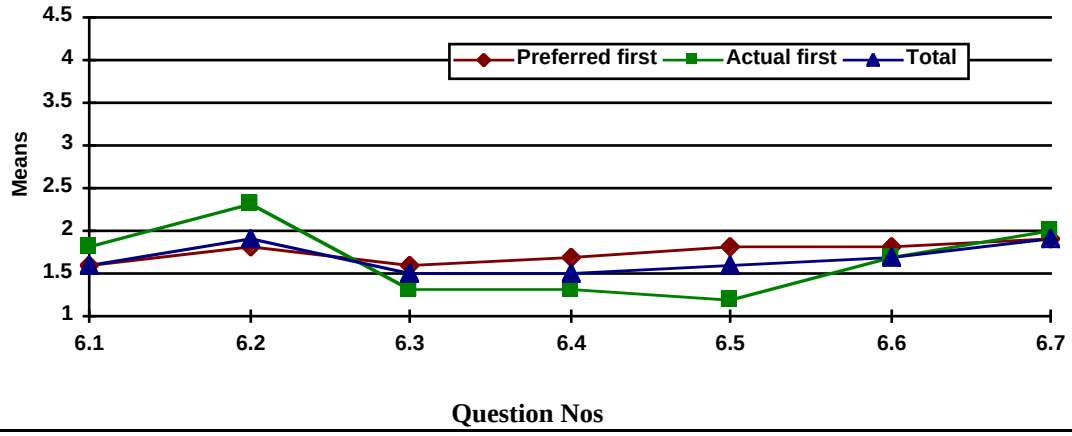
Resource development *(Preferred situation)*



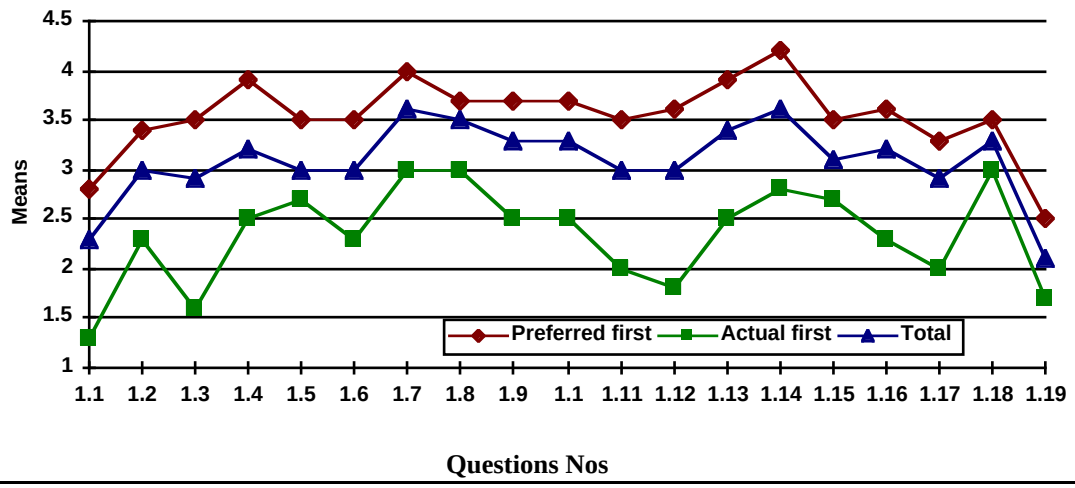
Staff development *(Preferred situation)*



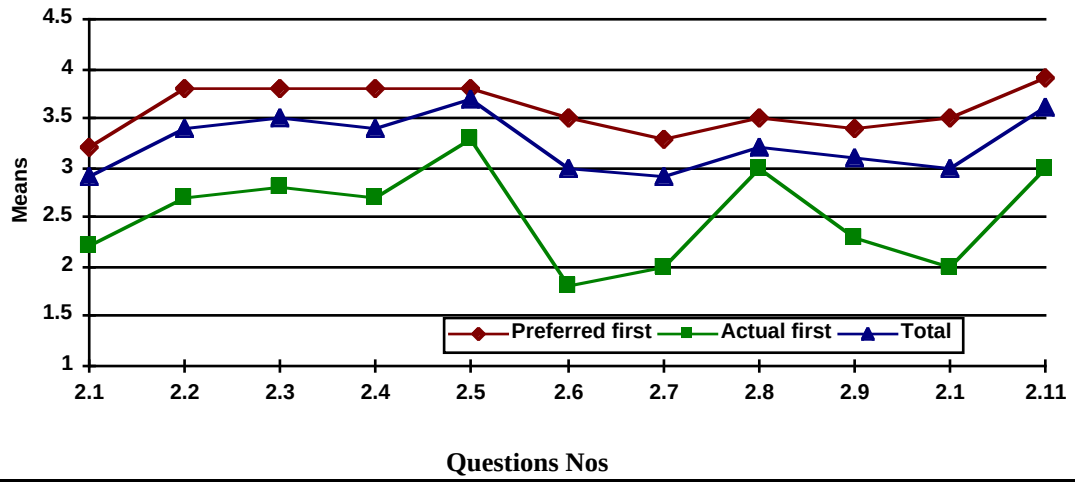
Formative evaluation and feedback on implementation *(Preferred situation)*



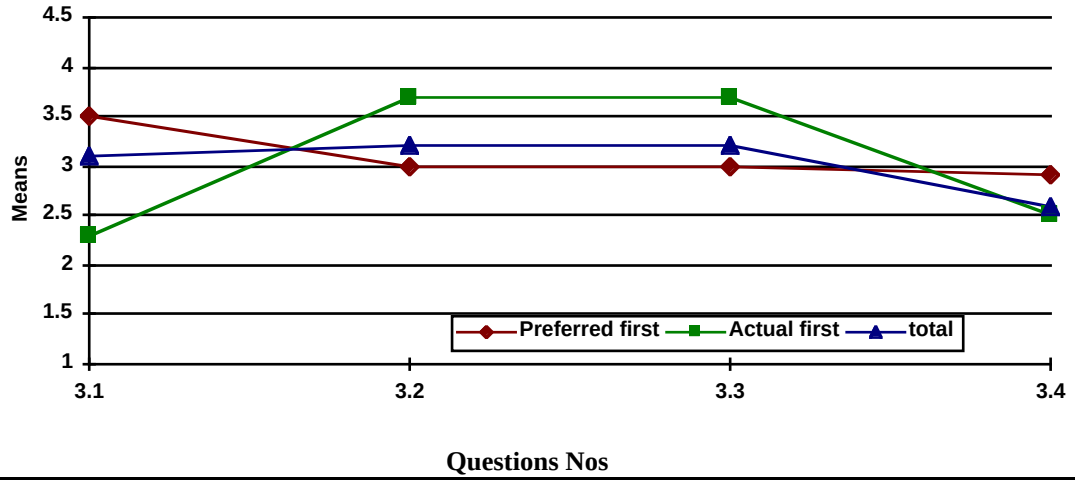
Information on curriculum development *(Actual situation)*



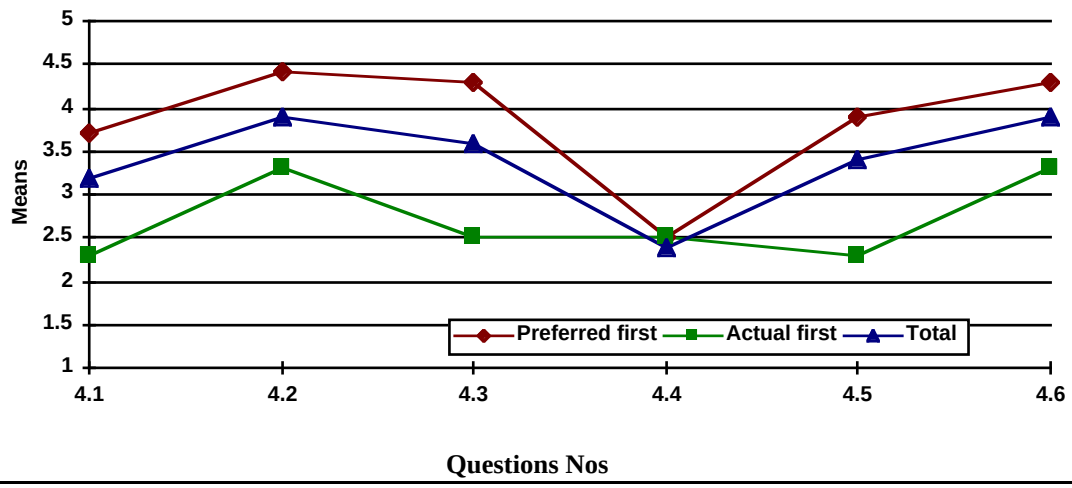
Involvement in curriculum development *(Actual situation)*



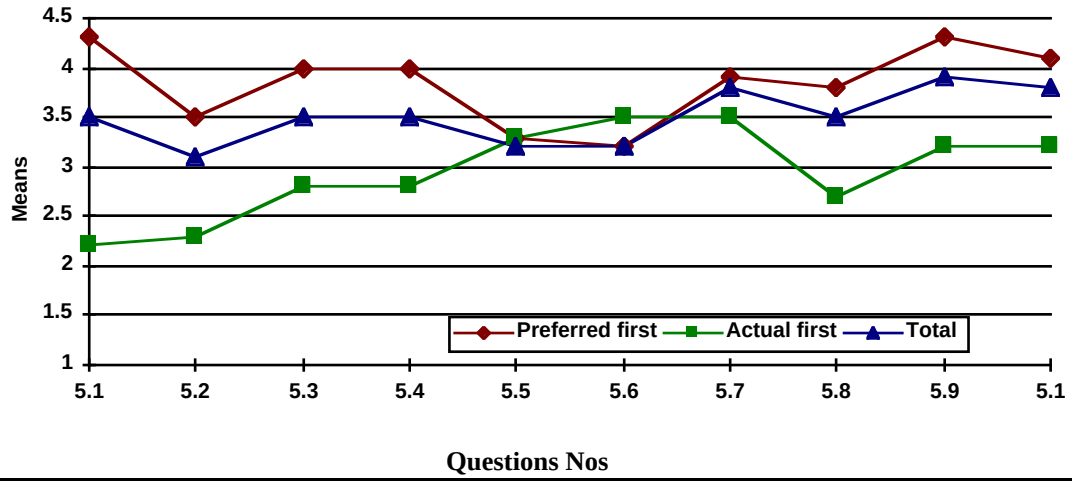
Complexity of project *(Actual situation)*



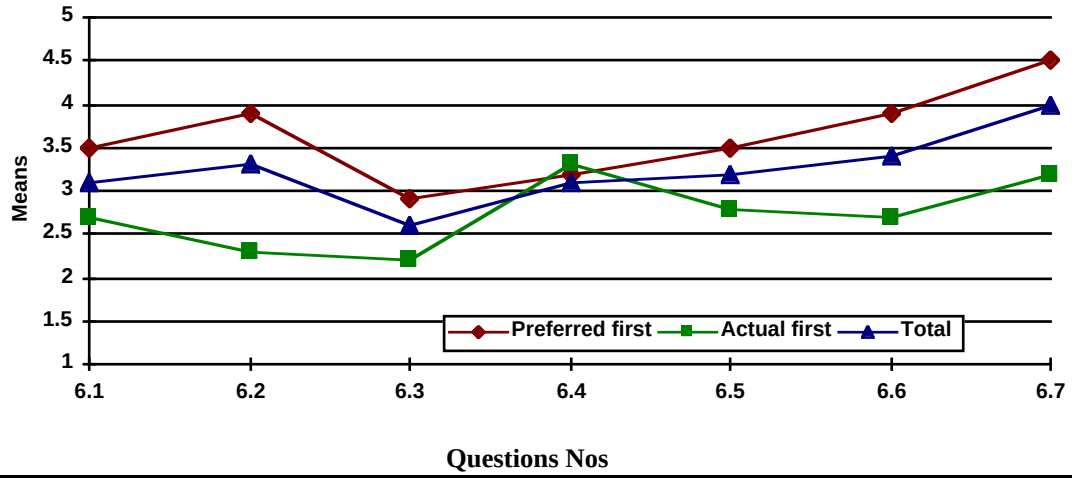
Resource development *(Actual situation)*



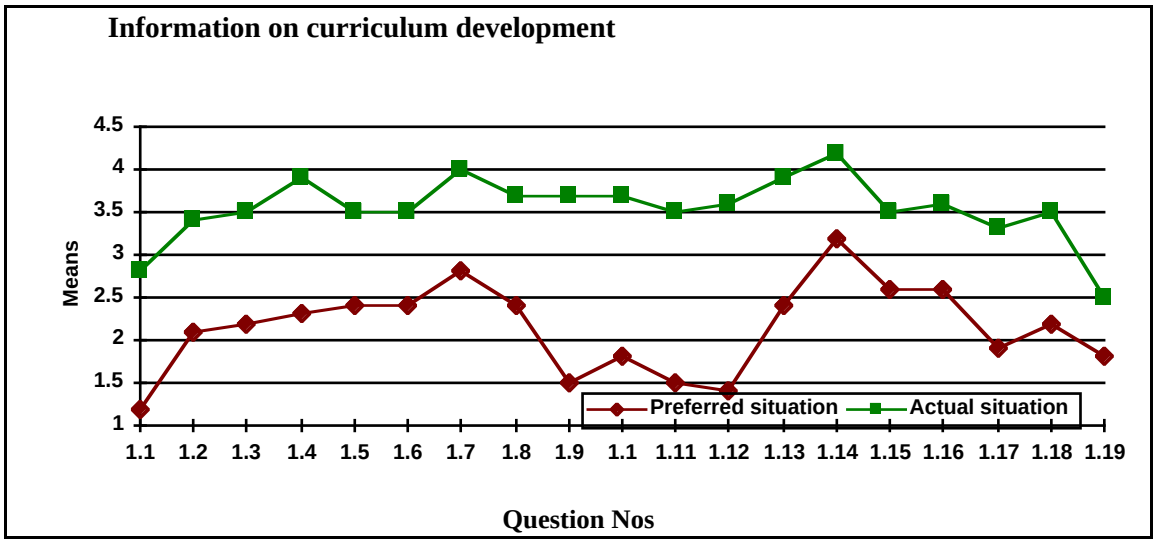
Staff development *(Actual situation)*

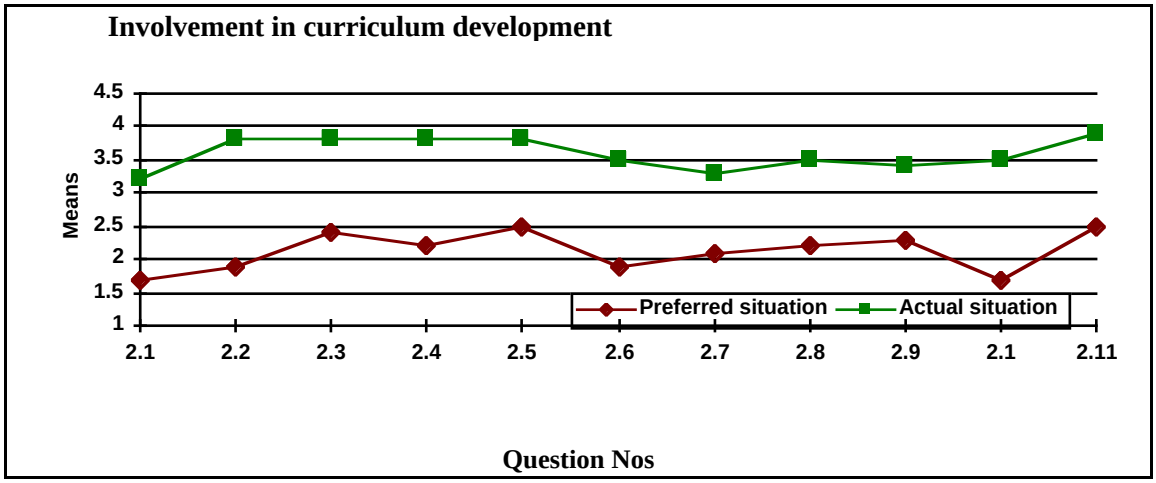


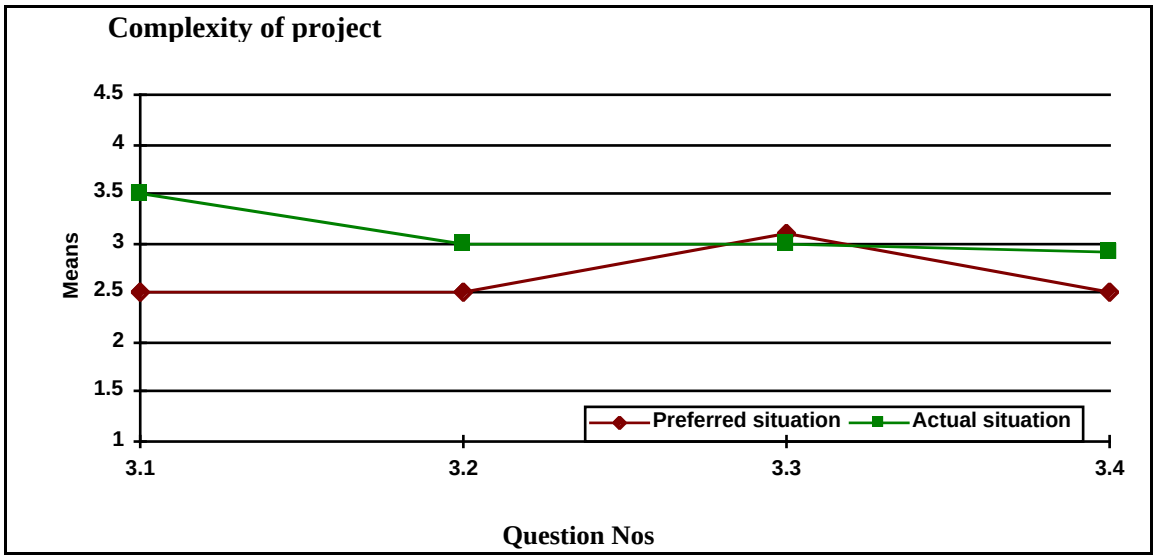
Formative evaluation and feedback on implementation *(Actual situation)*

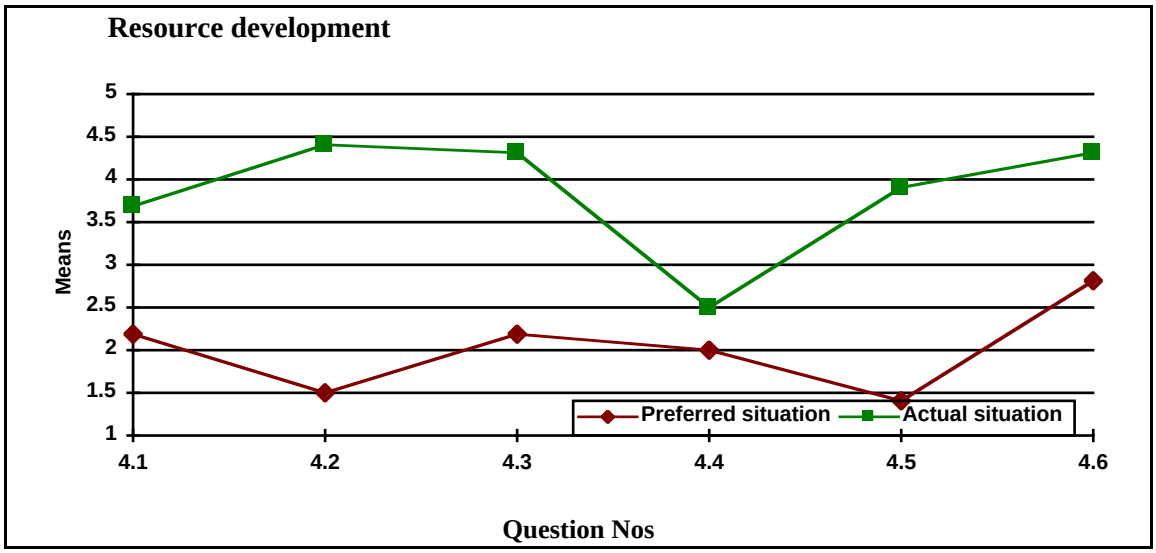


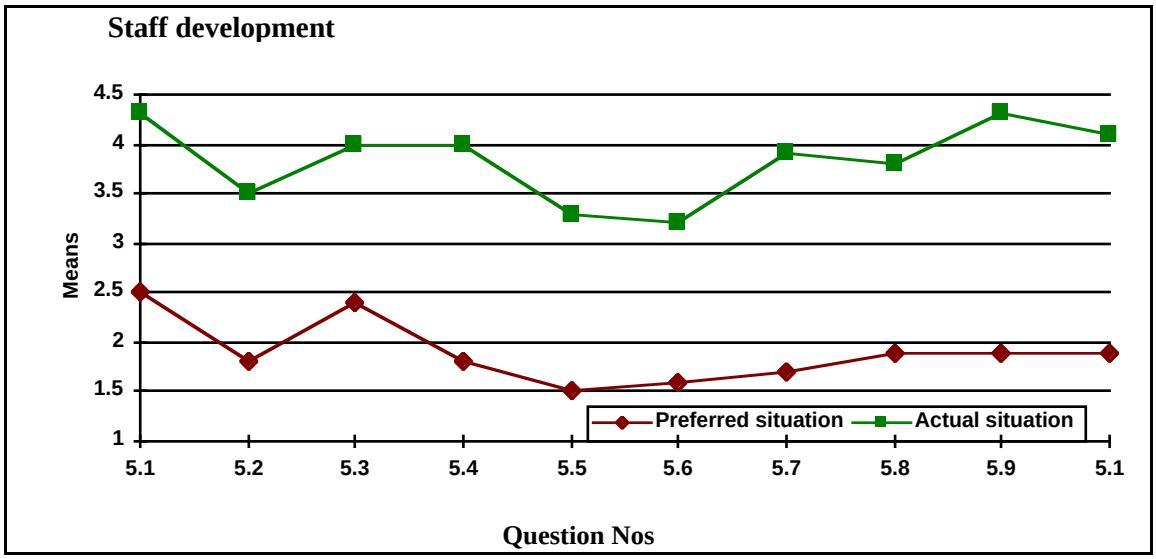
Appendix B6: Differences between preferred and actual situation: Trial responses *(1 = most important; 5 = least important)*

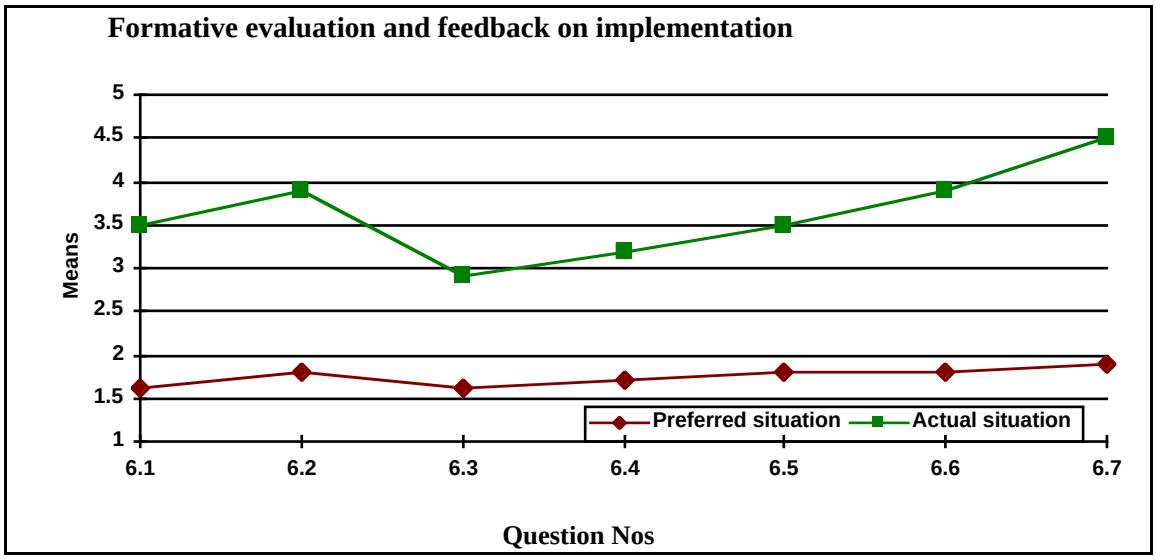







Resource development
Means
5
4.5
4
3.5
3
2.5
2
1.5
1
4.1
4.2
4.3
4.4
4.5
4.6
Preferred situation
Actual situation
Question Nos

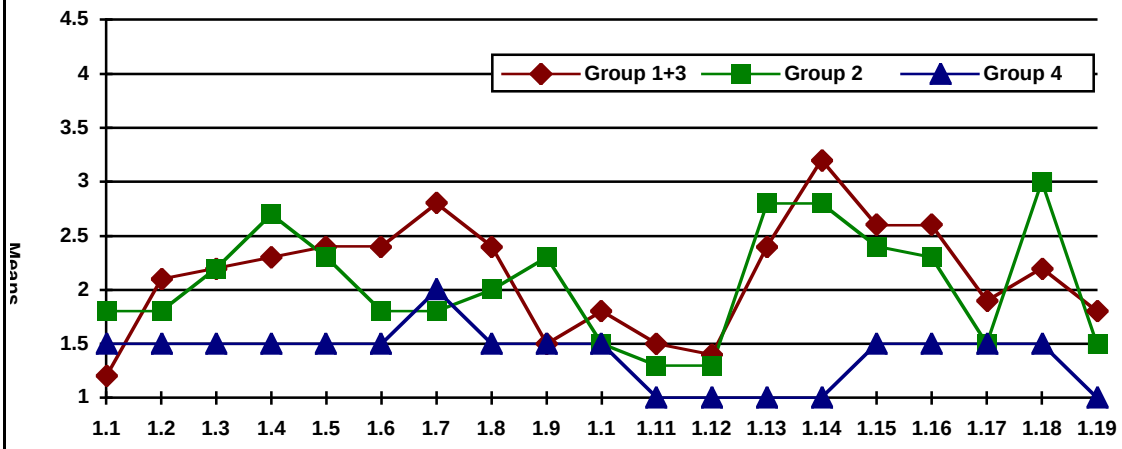

Staff development
Means
4.5
4
3.5
3
2.5
2
1.5
1
5.1
5.2
5.3
5.4
5.5
5.6
5.7
5.8
5.9
5.1
Preferred situation
Actual situation
Question Nos


Formative evaluation and feedback on implementation
Means
5
4.5
4
3.5
3
2.5
2
1.5
1
6.1
6.2
6.3
6.4
6.5
6.6
6.7
Preferred situation
Actual situation
Question Nos

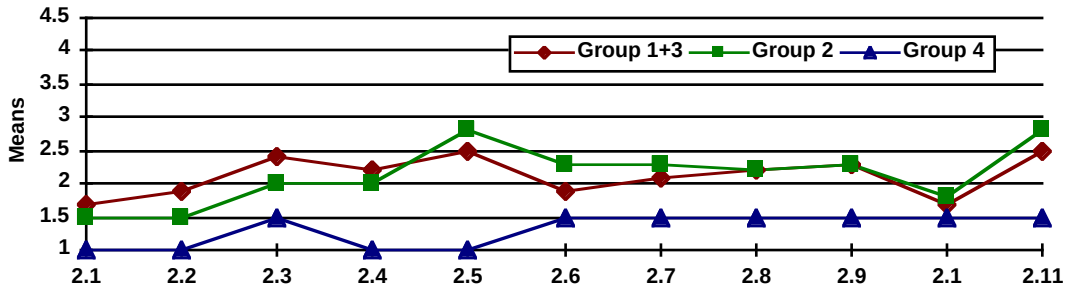
Appendix B7: Comparison of responses of groups 1+3, 2 and 4

(1 = most important; 5 = least important)

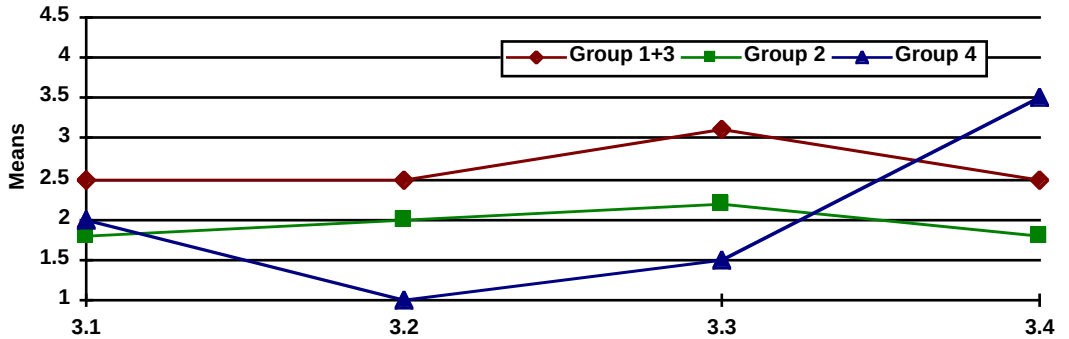
Information on curriculum development *(Preferred situation)*



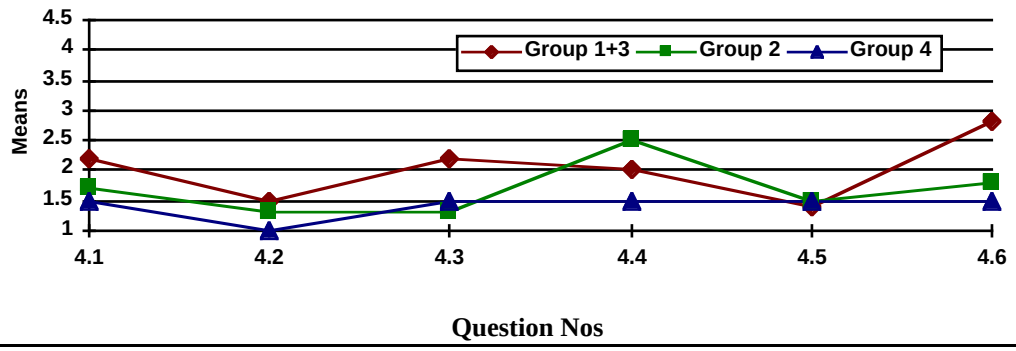
Involvement in curriculum development *(Preferred situation)*



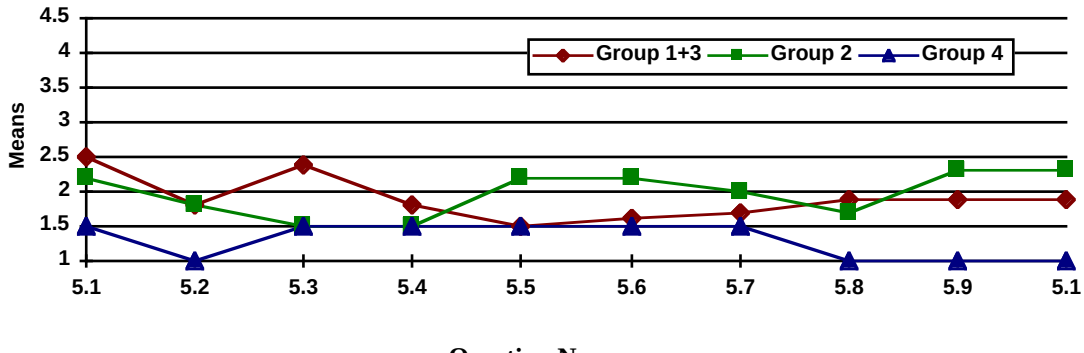
Complexity of project *(Preferred situation)*



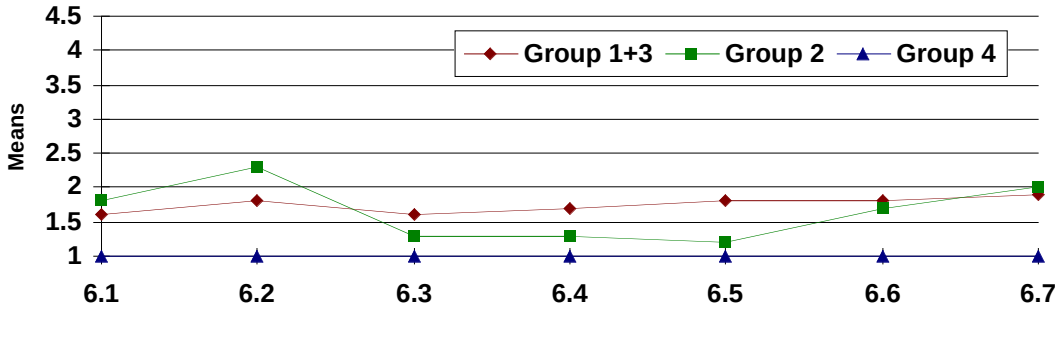
Resource development *(Preferred situation)*



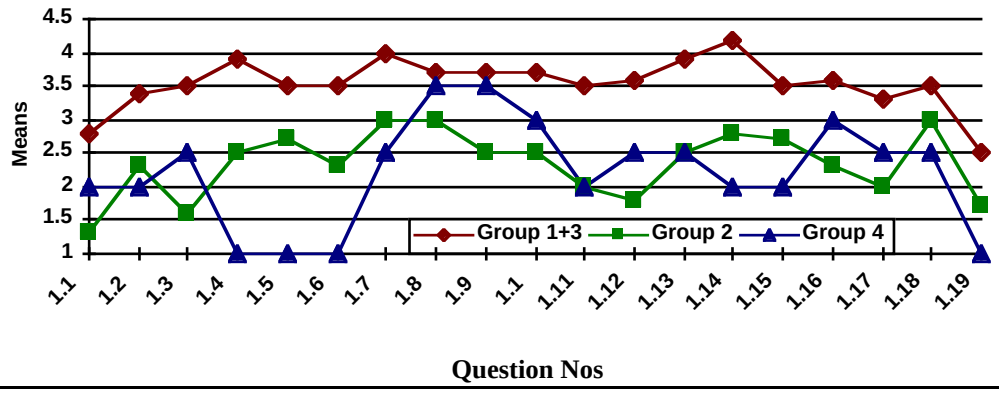
Staff development *(Preferred situation)*



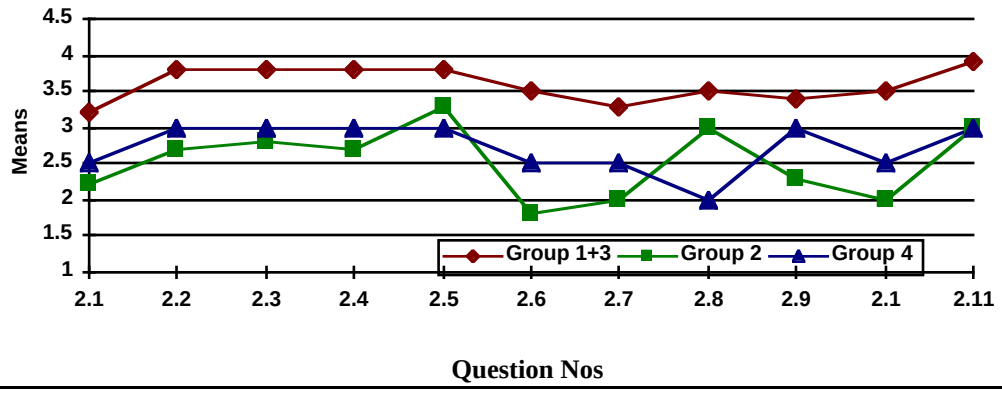
Formative evaluation and feedback on implementation *(Preferred situation)*



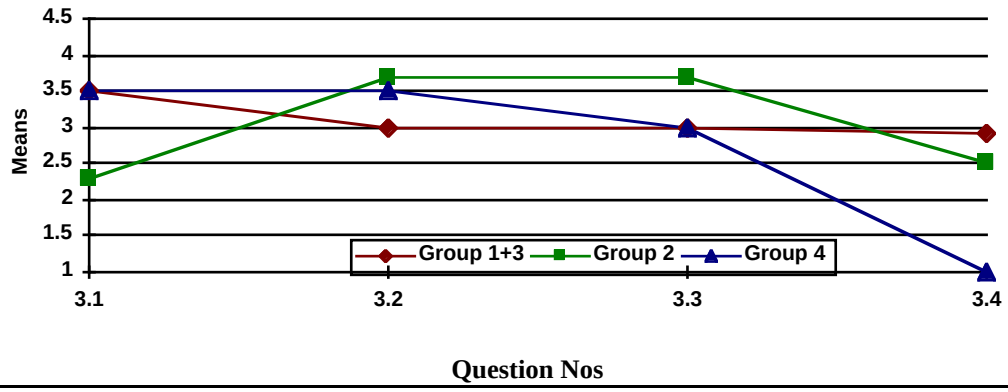
Information on curriculum development *(Actual situation)*



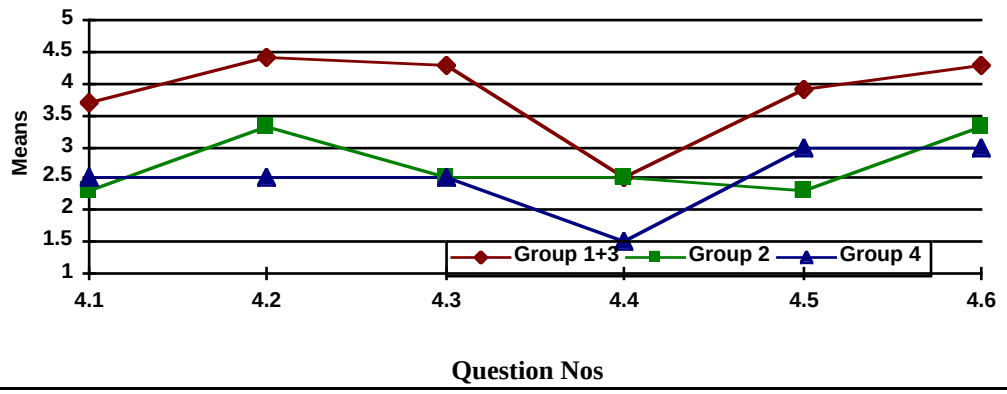
Involvement in curriculum development *(Actual situation)*



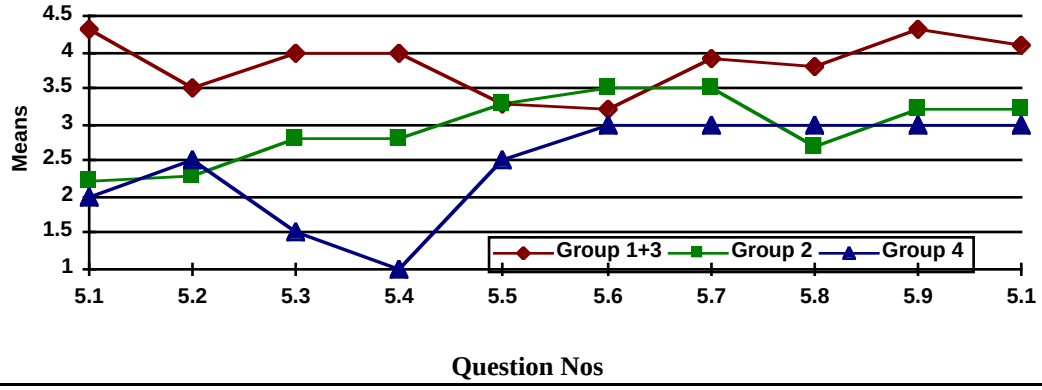
Complexity of project *(Actual situation)*



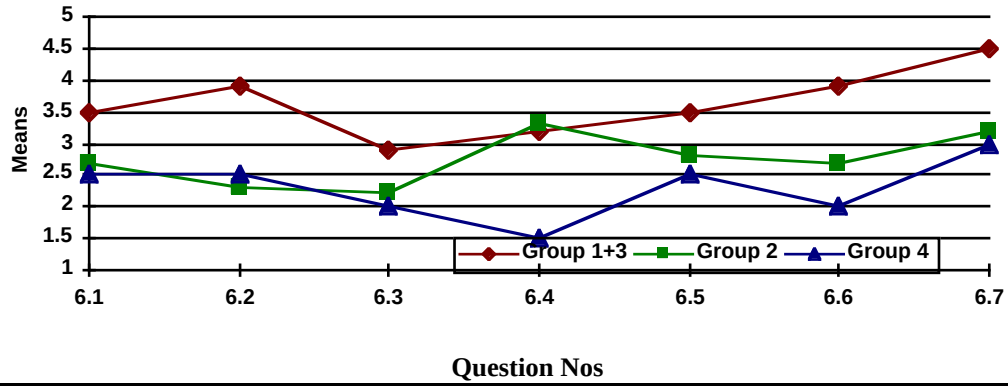
Resource development *(Actual situation)*



Staff development *(Actual situation)*



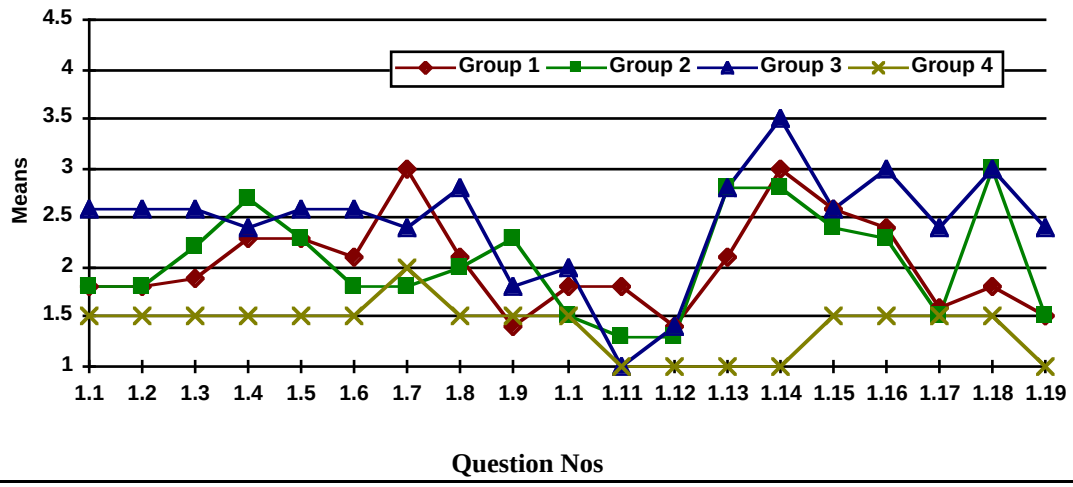
Formative evaluation and feedback on implementation *(Actual situation)*



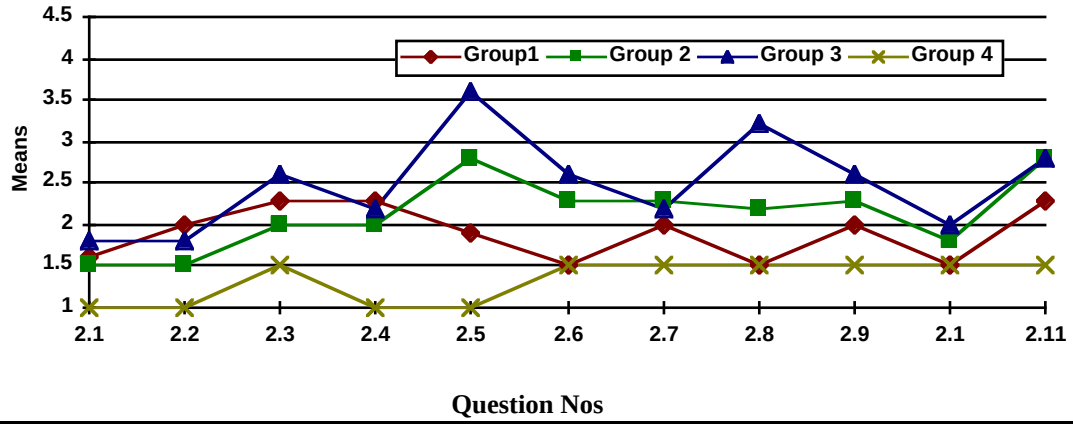
Appendix B8: Comparison of responses of Groups 1, 2, 3 and 4

(1 = most important; 5 = least important)

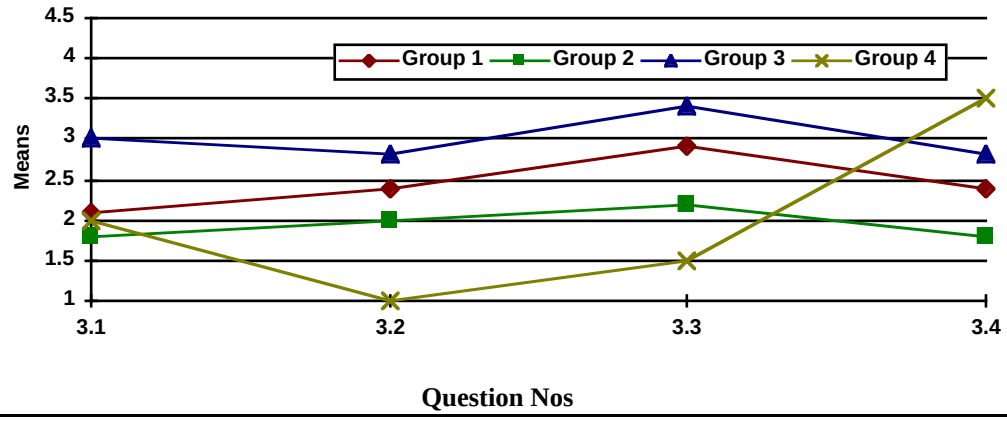
Information on curriculum development *(Preferred situation)*



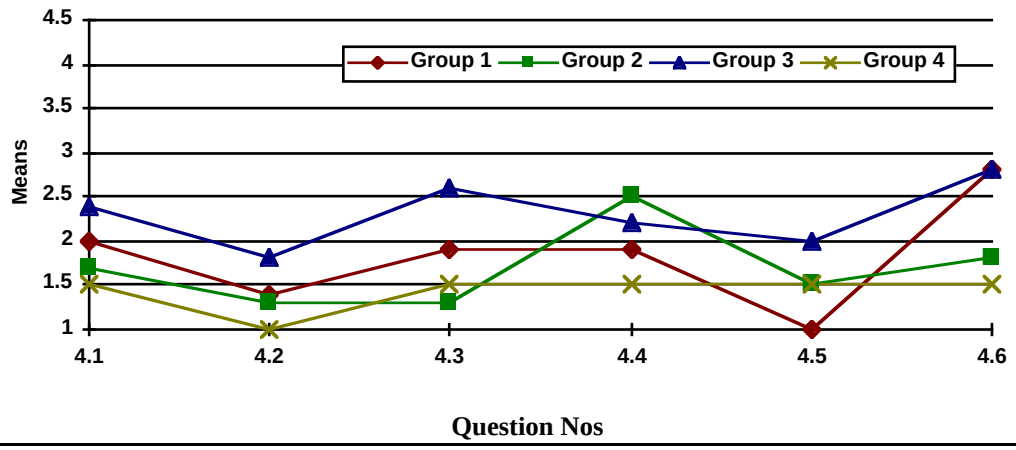
Involvement in curriculum development *(Preferred situation)*



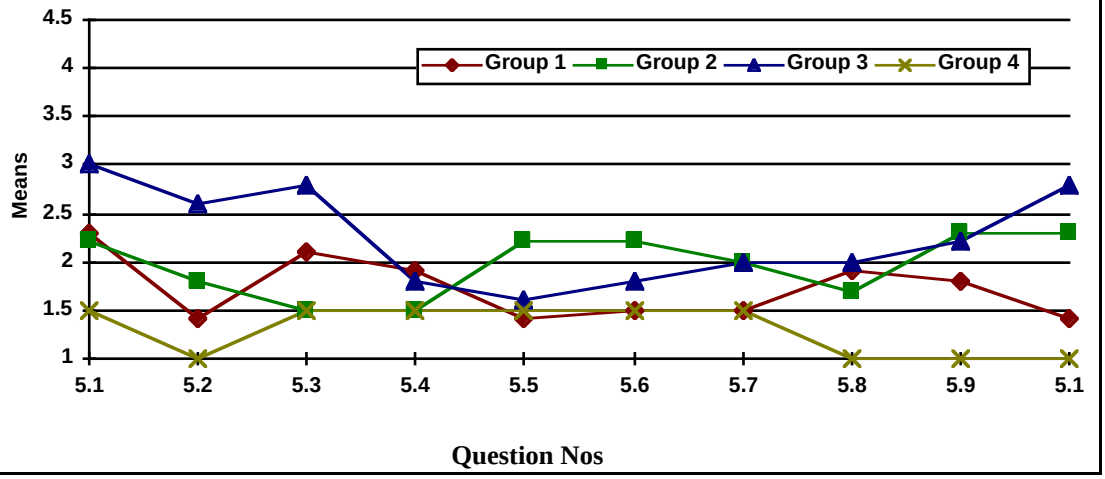
Complexity of project *(Preferred situation)*



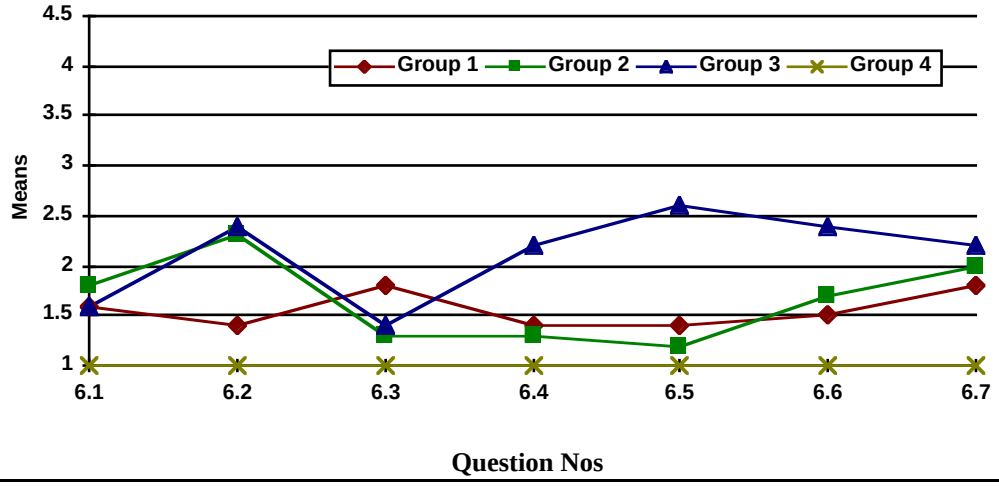
Resource development *(Preferred situation)*



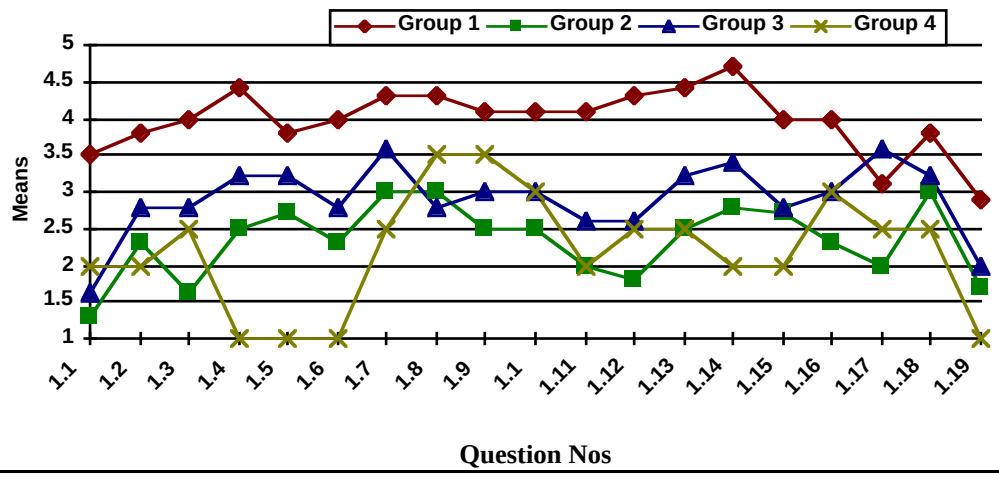
Staff development *(Preferred situation)*



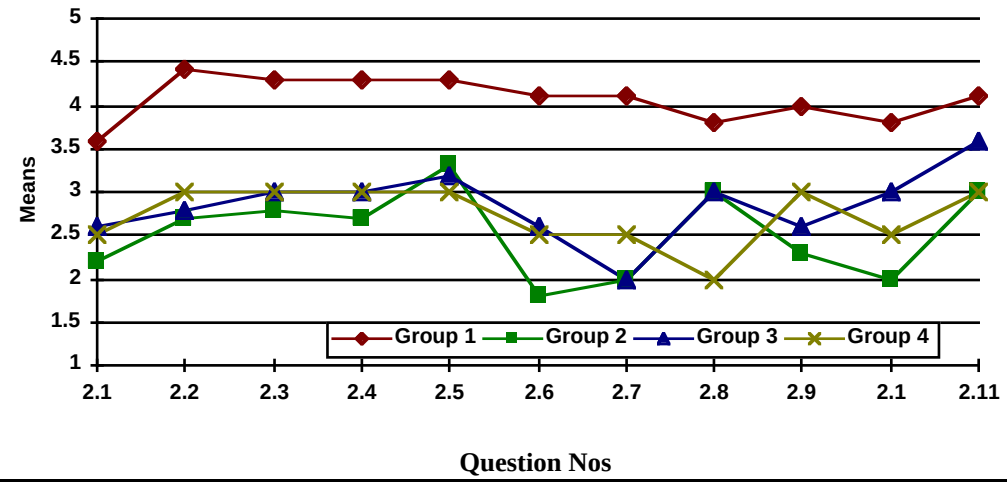
Formative evaluation and feedback on implementation *(Preferred situation)*



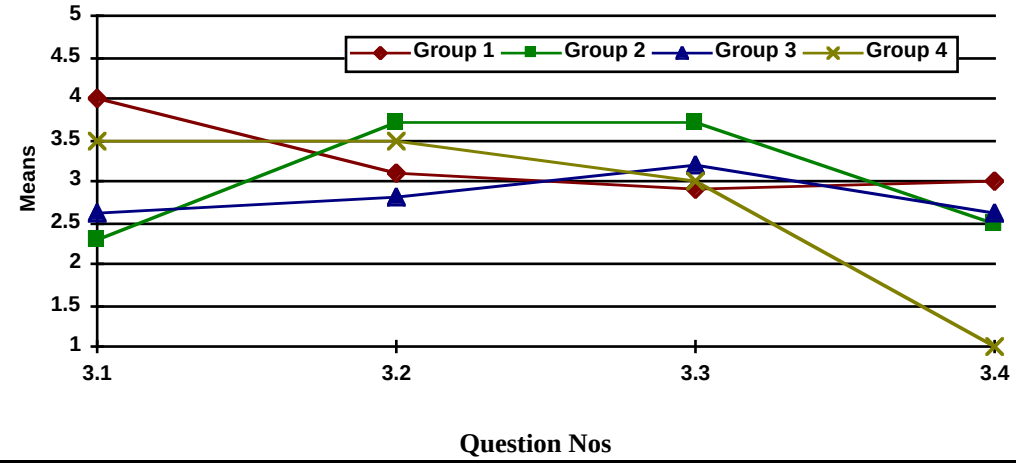
Information on curriculum development *(Actual situation)*



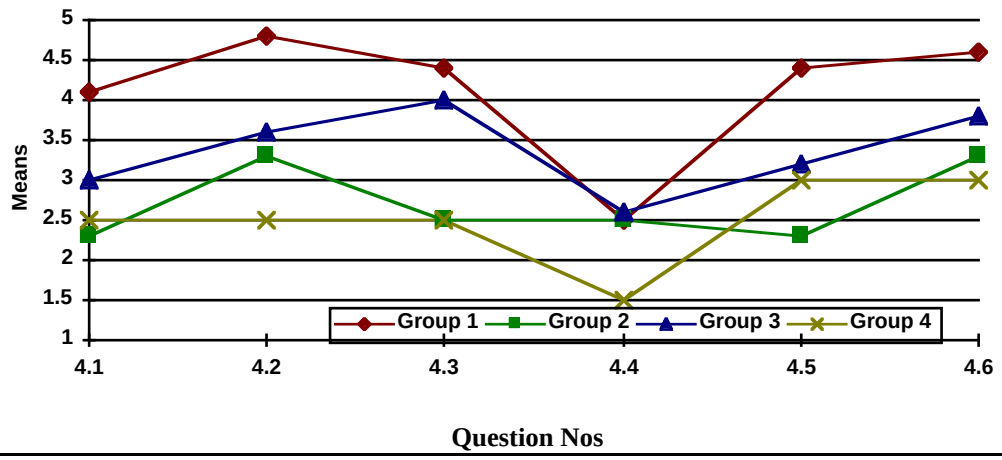
Involvement in curriulum development *(Actual situation)*



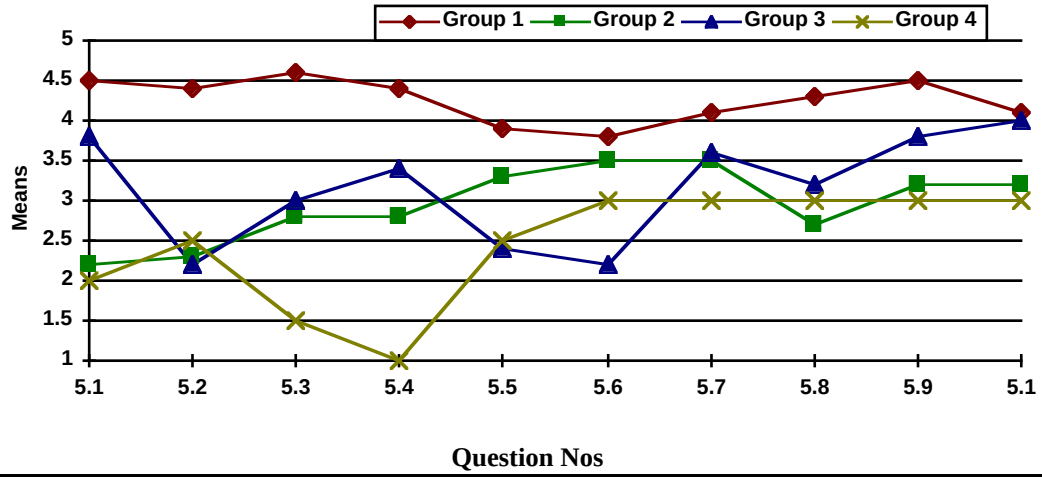
Complexity of project *(Actual situation)*



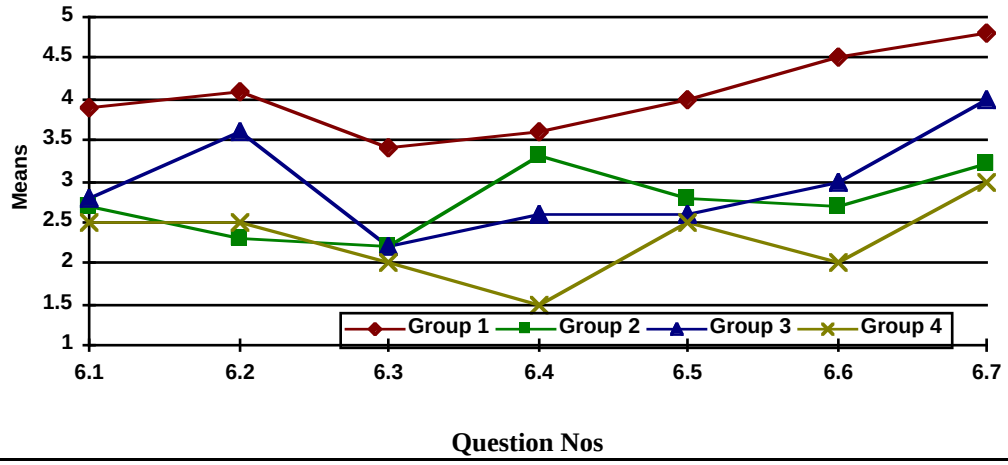
Resource developmnt *(Actual sitution)*



Staff development *(Actual situation)*



Formative evaluation and feedback on implementation *(Actual situation)*



Appendices C1 - C5: The survey questionnaire

Page

Appendix C1: Modified questionnaire used in survey and covering letter

Faculty of Education
GPO Box U1987
Perth 6001
Western Australia
Telephone (09) 351 2182

May 1993

«Name»
«Address»

You have been selected to participate in a curriculum survey, on the basis of your recent experience teaching the new «innovation»

The aim of this survey is to collect information from TAFE lecturers about their experiences in dealing with the introduction of a new syllabus, or new curricular ideas or materials. The questions are meant to be answered from your own point of view, as user, not from the point of view of management or administration.

A number of factors have been identified from a pilot study and from the literature on research and have been set out as statements in this three part survey instrument. You are asked to

a) complete the first part, reacting to the statements about your *Preferred Situation,* or what you think should happen, or what you would like to happen, when implementing new curriculum ideas or materials;
b) try the same set of statements again under the heading *Actual Situation,* in relation to what actually did happen in your specific curriculum innovation,
c) complete a general page asking for details about the curriculum innovation.

Either the Researcher or the Research Assistant will telephone you about a week after you receive this and will arrange a time to collect your completed forms. If you have any queries, please contact me on 351 2182.

Your answers will be treated with confidentiality. Only the Researcher and Research Assistant will see the completed survey forms. Your cooperation is highly appreciated, and I take this opportunity of thanking you very much for your help.

Clare McBeath
Senior Lecturer in Curriculum Studies
Curtin University of Technology

Curriculum dissemination: Preferred situation

In the **Ideal Situation** how important would you consider each of the following characteristics of curriculum dissemination? Give your answer on the scale of 1 to 5, where 1 is the least important and 5 is the most.

		least important	**1**	**2**	**3**	**4**	**5**	most important
1.	**INFORMATION ON CURRICULUM DEVELOPMENT**							
	How important is it that lecturers be informed about							
1.1	a major curriculum innovation about to begin in their study area		☐	☐	☐	☐	☐	
1.2	minor revision being planned in their study area		☐	☐	☐	☐	☐	
1.3	any revisions being planned in their *subject*		☐	☐	☐	☐	☐	
1.4	who the Project leader is		☐	☐	☐	☐	☐	
1.5	who the Curriculum Officer is		☐	☐	☐	☐	☐	
1.6	which senior TAFE staff are involved		☐	☐	☐	☐	☐	
1.7	who the industry representatives are		☐	☐	☐	☐	☐	
1.8	what sort of needs analysis was done		☐	☐	☐	☐	☐	
1.9	the results of the needs analysis		☐	☐	☐	☐	☐	
1.10	design decisions (shape and structure of the course)		☐	☐	☐	☐	☐	
1.11	changes in content planned for the new course		☐	☐	☐	☐	☐	
1.12	educational changes planned for course (methods, delivery, entry and exit points, competency based etc)		☐	☐	☐	☐	☐	
1.13	the completed SESDA accreditation documents		☐	☐	☐	☐	☐	
1.14	who is developing the subject syllabuses		☐	☐	☐	☐	☐	
1.15	who is developing other resources		☐	☐	☐	☐	☐	
1.16	plans for new equipment and materials		☐	☐	☐	☐	☐	
1.17	plans for staffing, student market, funding etc.		☐	☐	☐	☐	☐	
1.18	when the new course is planned to begin		☐	☐	☐	☐	☐	
2.	**INVOLVEMENT IN CURRICULUM DEVELOPMENT**							
	How important is it that lecturing staff be invited to							
2.1	give input to a needs analysis		☐	☐	☐	☐	☐	
2.2	comment on the results of a needs analysis		☐	☐	☐	☐	☐	
2.3	communicate with the industry representatives involved in curriculum development		☐	☐	☐	☐	☐	
2.4	communicate with the development team on industry related matters		☐	☐	☐	☐	☐	

		least important	1	2	3	4	5	most important
2.5	communicate with the Project leader expressing interest in the project		☐	☐	☐	☐	☐	
2.6	participate in decision making about the design of the course		☐	☐	☐	☐	☐	
2.7	participate in decision making about the learning outcomes of the course		☐	☐	☐	☐	☐	
2.8	participate in discussion of SESDA accreditation documents and give input		☐	☐	☐	☐	☐	
2.9	participate in syllabus writing (especially competencies)		☐	☐	☐	☐	☐	
2.10	discuss completed syllabus documents and give input		☐	☐	☐	☐	☐	
2.11	volunteer for participation in resource development		☐	☐	☐	☐	☐	

3. RESOURCE DEVELOPMENT

How important is it that

3.1	the curriculum team develop resources and teaching materials		☐	☐	☐	☐	☐	
3.2	lecturers be given time off teaching to develop teaching materials for the team		☐	☐	☐	☐	☐	
3.3	lecturers nominate someone from their study area to develop teaching materials		☐	☐	☐	☐	☐	
3.4	lecturers develop their own materials using the completed syllabus documents		☐	☐	☐	☐	☐	
3.5	lecturers have a chance to see and discuss other people's teaching materials		☐	☐	☐	☐	☐	
3.6	common resource materials be developed in conjunction with TESC or Joondalup		☐	☐	☐	☐	☐	

4. STAFF DEVELOPMENT

How important is it that

4.1	lecturers be kept informed in writing of all major decisions throughout the development process		☐	☐	☐	☐	☐	
4.2	staff development meetings be held throughout the development process to discuss the major decisions		☐	☐	☐	☐	☐	
4.3	staff development meetings be able to change the curriculum documents before accreditation		☐	☐	☐	☐	☐	
4.4	staff development meetings be held after accreditation so that you can discuss the new documents		☐	☐	☐	☐	☐	
4.5	staff development meetings be able to change the syllabus documents after accreditation		☐	☐	☐	☐	☐	

		least important	**1**	**2**	**3**	**4**	**5**	most important
4.6	staff development meetings devise an implementation plan		☐	☐	☐	☐	☐	
4.7	staff development meetings be devoted to any new content (knowledge)		☐	☐	☐	☐	☐	
4.8	staff development meetings be devoted to any new skills development		☐	☐	☐	☐	☐	
4.9	some staff development meetings include the members of the development team		☐	☐	☐	☐	☐	
4.10	some staff development meetings include industry representatives involved in the curriculum development		☐	☐	☐	☐	☐	
4.11	the minutes of staff development meetings be made available to all involved in implementing the new course		☐	☐	☐	☐	☐	

5. FORMATIVE EVALUATION AND FEEDBACK ON IMPLEMENTATION

	How important is it that lecturers be invited to						
5.1	collect feedback from students	☐	☐	☐	☐	☐	
5.2	collect feedback from employers of students	☐	☐	☐	☐	☐	
5.3	collect data of their own experiences and opinions about teaching the course	☐	☐	☐	☐	☐	
5.4	attend staff meetings to share and discuss data	☐	☐	☐	☐	☐	
5.5	attend meetings with senior staff to give feedback	☐	☐	☐	☐	☐	
5.6	attend meeting with the curriculum team to give feedback	☐	☐	☐	☐	☐	
5.7	attend meeting with industry representatives to give feedback	☐	☐	☐	☐	☐	

Comments .....

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Curriculum dissemination: Actual situation

Think of an **Actual Situation** where you had to cope with a new or revised course or subject being developed in your study area. Answer this questionnaire to describe on the scale of 1 to 5, how important each of these factors was in this particular project. Give your answer on the scale of 1 to 5, where 1 is the least important and 5 is the most.

		least important	**1**	**2**	**3**	**4**	**5**	most important
1.	**INFORMATION ON CURRICULUM DEVELOPMENT**							
	How important was it that you were informed about							
1.1	a major curriculum innovation beginning in your study area		☐	☐	☐	☐	☐	
1.2	minor revision being planned in your study area		☐	☐	☐	☐	☐	
1.3	any revisions being planned in your *subject*		☐	☐	☐	☐	☐	
1.4	who the Project leader was		☐	☐	☐	☐	☐	
1.5	who the Curriculum Officer was		☐	☐	☐	☐	☐	
1.6	which senior TAFE staff were involved		☐	☐	☐	☐	☐	
1.7	who the industry representatives were		☐	☐	☐	☐	☐	
1.8	what sort of needs analysis was done		☐	☐	☐	☐	☐	
1.9	the results of the needs analysis		☐	☐	☐	☐	☐	
1.10	design decisions (shape and structure of the course)		☐	☐	☐	☐	☐	
1.11	changes in content planned for the new course		☐	☐	☐	☐	☐	
1.12	educational changes planned for course (methods, delivery, entry and exit points, competency based etc)		☐	☐	☐	☐	☐	
1.13	the completed SESDA accreditation documents		☐	☐	☐	☐	☐	
1.14	who was developing your subject syllabuses		☐	☐	☐	☐	☐	
1.15	who was developing other resources		☐	☐	☐	☐	☐	
1.16	plans for new equipment and materials		☐	☐	☐	☐	☐	
1.17	plans for staffing, student market, funding etc.		☐	☐	☐	☐	☐	
1.18	when the new course was planned to begin		☐	☐	☐	☐	☐	
2.	**INVOLVEMENT IN CURRICULUM DEVELOPMENT**							
	How important was it that you were invited to							
2.1	give input to a needs analysis		☐	☐	☐	☐	☐	
2.2	comment on the results of a needs analysis		☐	☐	☐	☐	☐	
2.3	communicate with the industry representatives involved in curriculum development		☐	☐	☐	☐	☐	
2.4	communicate with the development team on industry related matters		☐	☐	☐	☐	☐	

		least important	**1**	**2**	**3**	**4**	**5**	most important
2.5	communicate with the Project leader expressing your interest in the project		☐	☐	☐	☐	☐	
2.6	participate in decision making about the design and structure of the course		☐	☐	☐	☐	☐	
2.7	participate in decision making about the learning outcomes of the course		☐	☐	☐	☐	☐	
2.8	participate in discussion of SESDA accreditation documents and give input		☐	☐	☐	☐	☐	
2.9	participate in syllabus writing (especially competencies)		☐	☐	☐	☐	☐	
2.10	discuss completed syllabus documents and give input		☐	☐	☐	☐	☐	
2.11	volunteer for participation in resource development		☐	☐	☐	☐	☐	

3. RESOURCE DEVELOPMENT

How important was it that

3.1	the curriculum team developed resources and teaching materials		☐	☐	☐	☐	☐	
3.2	you were given time off teaching to develop teaching materials for the team		☐	☐	☐	☐	☐	
3.3	you nominated someone from your study area to develop teaching materials		☐	☐	☐	☐	☐	
3.4	you developed your own materials using the completed syllabus documents		☐	☐	☐	☐	☐	
3.5	you saw and discussed other people's teaching materials		☐	☐	☐	☐	☐	
3.6	common resource materials were developed in conjunction with TESC or Joondalup		☐	☐	☐	☐	☐	

4. STAFF DEVELOPMENT

How important was it that

4.1	you were kept informed in writing of all major decisions throughout the development process		☐	☐	☐	☐	☐	
4.2	staff development meetings were held throughout the development process to discuss the major decisions		☐	☐	☐	☐	☐	
4.3	staff development meetings were able to change the curriculum documents before accreditation		☐	☐	☐	☐	☐	
4.4	staff development meetings were held after accreditation so that you could discuss the new documents		☐	☐	☐	☐	☐	
4.5	staff development meetings were able to change the syllabus documents after accreditation		☐	☐	☐	☐	☐	

		least important	1	2	3	4	5	most important
4.6	staff development meetings devised an implementation plan		☐	☐	☐	☐	☐	
4.7	staff development meetings were devoted to new content (knowledge)		☐	☐	☐	☐	☐	
4.7	staff development meetings were devoted to new skills development		☐	☐	☐	☐	☐	
4.9	some staff development meetings included the members of the development team		☐	☐	☐	☐	☐	
4.10	some staff development meetings included industry representatives involved in the curriculum development		☐	☐	☐	☐	☐	
4.11	the minutes of staff development meetings were made available to all involved in implementing the new course		☐	☐	☐	☐	☐	

5. FORMATIVE EVALUATION AND FEEDBACK ON IMPLEMENTATION

	How important was it that you were invited to						
5.1	collect feedback from students	☐	☐	☐	☐	☐	
5.2	collect feedback from employers of students	☐	☐	☐	☐	☐	
5.3	collect data of your own experiences and opinions about teaching the course	☐	☐	☐	☐	☐	
5.4	attend staff meetings to share and discuss data	☐	☐	☐	☐	☐	
5.5	attend meetings with senior staff to give feedback	☐	☐	☐	☐	☐	
5.6	attend meeting with the curriculum team to give feedback	☐	☐	☐	☐	☐	
5.7	attend meeting with industry representatives to give feedback	☐	☐	☐	☐	☐	

Comments .....

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Please answer the following in regard to the new curriculum you have been involved in.

Type of curriculum innovation

Was it a *new* course/idea?	Yes ☐	No ☐
Was it a *revised* course/idea?	Yes ☐	No ☐
Did it include new content?	Yes ☐	No ☐
Did it include new course structure?	Yes ☐	No ☐
Did it include new educational ideas? (methods, delivery, entry and exit points, competency based approaches, etc)	Yes ☐	No ☐
Did it include new ideas from industry?	Yes ☐	No ☐
Did it include new technology?	Yes ☐	No ☐
Did it include new industry practices?	Yes ☐	No ☐

Characteristics of curriculum innovation

Did you see a need for change?		Yes ☐	No ☐
Give details			
.....			
What size was the change?	small ☐	medium ☐	large ☐
How complex was the change?	slightly ☐	medium ☐	very ☐

How much support did you have during the change? (give brief details)

personal? .....

financial? .....

material? (resources) .....

How do you feel about the innovation? .....

.....

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.....

State how long you have been teaching. .....

State how long you have been teaching this new course. .....

Full Time or Part Time .....

If you would be prepared to be interviewed in more detail about this innovation at a later date, please give your name and phone number here. .....

.....

.....

Thank you very much for participating in this survey.

Appendix C2: Selection of proportional sample from subgroups within projects

Project	Total popul-ation	% for sample	College offering project	Staff in each college	Sample in each college	Total sample
1. Joondalup Campus flexible deliveries project	26	15.8	Joondalup *General Studies* *Accounting* *Computing* *Office and Sect. St.*	 8 6 6 6	 5 4 4 3	16
2. Associate Diploma of Business (Management)	24	14.5	Perth Bunbury TES	13 6 5	8 4 3	15
3. Certificate of Hairdressing computerised learning	22	13.3	Albany Balga Fremantle Geraldton Kalgoorlie Midlands Thornlie	1 5 3 3 1 3 6	1 3 2 2 0 2 3	13
4. Advanced Certificate of Surveying; Associate Diploma Applied Science (Surveying). Diploma of Applied Science (Surveying)	20	12.1	Wembley . Bunbury *(Advanced Cert and Associate Diploma only)*	17 3	10 2	12
5. Advanced Manufacturing Technologies Centre	20	12.1	AMTC 46 PT *Engineering* *Science* *Computing*	20 5 5 2	12	12
6. Engineering Tradesperson (Electrical)	15	9.1	Balga Midlands Bunbury	5 6 4	3 4 2	9
7. National Metals project: Fitting and Machining	10	6.1	Carine Geraldton Collie TAFE Centre	8 1 1	4 1 1	6
8. Associate Diploma in Applied Science (Work Safety and Health); and Advanced Certificate of Work Safety and Health	10	6.1	Bentley 26 PT	10	6	6
9. Accelerated Associate Diploma of Applied Science (Fashion)	8	4.8	Bentley	8	5	5
10. Associate Diploma of Applied Sciences (Applied Language Studies) (4)	4	2.4	Perth	4	2	2
11. National Metals project: Foundry (including Pattern making)	3	1.8	Wembley	3	2	2
12. Certificate of Gardening Skills	3	1.8	Rockingham	3	2	2
Total	165	99.9		165	100	100

Appendix C3: Follow up letter

Faculty of Education
GPO Box U1987
Perth 6001
Western Australia
Telephone (09) 351 2182

July 30 1993

Towards the end of last semester we sent you a questionnaire on dissemination and implementation of an innovation in your teaching area. You were selected as part of a sample of TAFE lecturers who are currently introducing a new course or new practice.

To those of you who have not yet responded, this is a gentle reminder that your input will be very much appreciated and most valuable to the overall results. We know that the questionnaire is lengthy and that your time is precious, but we consider the topic to be important and close to the hearts of most TAFE lecturers. It is hoped that the findings may eventually assist Western Australia develop some insights into an issue which is not only national, but a world wide problem in curriculum change.

Would you please complete the questionnaire as soon as you can and put it in the *internal mail* addressed to Irena Harrison, SE Metro College of TAFE, Carine Campus. We plan to begin the analysis in mid August.

If further information or an extra questionnaire is needed, please phone Irena Harrison on 451 1539, or Clare McBeath on 351 2182.

To those of you who have returned the questionnaire please accept our sincere thanks and disregard this additional request.

Thank you very much.

Clare McBeath & Irena Harrison

Appendix C4: Letter of thanks

Faculty of Education
GPO Box U1987
Perth 6001
Western Australia
Telephone (09) 351 2182

August 28 1993

Dear Participant

As I have no means of identifying those who returned the questionnaires on *Curriculum dissemination in TAFE* (unless you gave your name and contact number, as nearly 25% of you did), I am sending this letter to all on the original mailing list.

To those of you who took part in the survey and returned the completed questionnaires, I would like to extend my appreciation and thanks. Your participation has supplied some valuable data and helped me focus on some very important issues in the process of curriculum change in TAFE in Western Australia. I realise how busy everybody is, especially those involved in curriculum change, and am grateful for the time you gave so generously. Some of you also have given me some beautifully quotable comments over and above the expected data. Please be assured that even though your project may be identified from other sources, the source of your specific information and comments will not be revealed at any stage.

Thanks also to those who agreed to be available for an interview at a later date. I will be in touch if it becomes necessary.

Some of you indicated an interest in the research project in general. Curriculum dissemination has been identified in the research literature as a major problem in curriculum development. While the TAFE sector throughout Australia has become increasingly sophisticated in the realm of curriculum development, dissemination and implementation still remain problematic. In spite of the attention currently paid to the change process in other areas, such as Business and Management, somehow educators, in all sectors, have not been able to come to grips with it successfully.

Your comments confirmed a worrying level of frustration, stress and inefficiency associated with change, which cannot be healthy for TAFE and DEVET at a time when it is trying to develop a new corporate image for the nineties. A number of you suggested reasons for this, and the most frequently mentioned factor was that of money. However, some defined other deficiencies, and I am hoping that all this information will add up to a practical, workable model for future innovation. If this should occur, Western Australia could lead the way in this area, because, I can assure you from experience that things are no better in other states. Unfortunately the findings will all be too late for you and your current project!

You may be interested in the following facts specific to this project. While my research focus is on dissemination, I could only collect information on teachers' perspectives by approaching it through implementation. Which is where you came in. It is surprisingly difficult to find out things going on in TAFE, and at least one of the curriculum areas I looked at didn't see itself as innovating at all. The odd wrong name turned up on my mailing list, and one person who actually supplied some really good data was not currently involved in the project I had selected! The innovations I looked at were

1. Joondalup flexible deliveries project.
2. Associate Diploma of Business (Management)
3. Certificate of Hairdressing computerised learning program.
4. Advanced Certificate of Surveying, and Associate Diploma Applied Science (Surveying).
5. Advanced Manufacturing Technologies Centre project (Science).
6. Advanced Manufacturing Technologies Centre project (Engineering).
7. Advanced Manufacturing Technologies Centre project (Computing).
8. National Metals project: Engineering Tradesperson (Electrical).
9. National Metals project: Engineering Tradesperson (Electrical) (NBB08 Instrumentation).
10. National Metals project: Fitting and Machining.
11. National Metals project: Foundry (including Pattern making).
12. Associate Diploma in Applied Science (Work Safety and Health); and Advanced Certificate of Work Safety and Health.
13. Accelerated Associate Diploma of Applied Science (Fashion).
14. Associate Diploma of Applied Sciences (Applied Language Studies).
15. Certificate of Gardening Skills.

The broad range of innovations surveyed may explain why some of the questions had to be so non-specific. The Study Area Leader, or an equivalent person, was interviewed and the general gist of what you were doing ascertained before your innovation was included. I may not have received data from all of the projects listed, but, as I am researching a process rather than finding out about actual projects, I will be able to use most of the data I received.

I was particularly interested in receiving completed questionnaires from country centres. Thanks to you people from Albany, Bunbury, Rockingham, Collie and Geraldton. The dissemination process has added dimensions for you, and I am delighted to have your insights into this difficult area. From the metropolitan area I thank respondents from North Metropolitan College of TAFE, Joondalup, Balga, and Carine; Central Metropolitan College of TAFE, Perth and Wembley; South East Metropolitan College of TAFE, Bentley and Thornlie; South Metropolitan College of TAFE, Fremantle; Midlands Regional College of TAFE, Midland; TAFE External Studies College, and from the Advanced Manufacturing Technologies Centre, East Perth.

If any of you feel you want to add further perspectives on this important area of research, add anything, or just want to chat to me about the issues or the research project, please feel free to ring me on 351 2182. If I am not there, you will be connected to an answering machine and I will endeavour to get back to you.

Yours faithfully

Clare McBeath
Senior lecturer in Curriculum Studies.
Faculty of Education

Appendix C5: Further follow up

Faculty of Education
GPO Box U1987
Perth 6001
Western Australia
Telephone (09) 351 2182

9 March 1994

Dear participant

Last year you were invited to take part in a survey of TAFE teachers regarding your perceptions of the curriculum dissemination process. 53% of the survey sample eventually responded, and I have expressed my thanks to those people in an earlier letter.

In December I presented a paper in Brisbane on the early results of that survey. I have since gone on to include a number of late arriving responses, and to develop the ideas further, but the conference paper includes the main thrust of the research findings. If you are interested, I would be happy to make copies available. If you would like a copy, please let me know by leaving a message on 351 2182, or by writing to me at the address above.

Yours faithfully

Clare McBeath
Senior lecturer in curriculum studies
Faculty of Education

Appendices D1 - D7: Questionnaire survey data

The documents used in this Appendix sometimes make reference to responses by the numbers 1-53. These numbers were attached to the questionnaires as they were received and the answers recorded. The numbers were retained for ease of reference to raw data if needed, and to aid consistency in the analysis.

Page

Appendix D1: Personal and innovation data

(from page 7 of survey questionnaire, shown in Appendix C1)

			Frequency of 'yes' response	No of replies
1)	53% response rate			53
2)	Identified by name and telephone no.			28 (53%)
3)	No of years teaching		Range 0 to 37 years; Total 664.5 years; Average 13.56 years	49
4)	Years teaching this course. (*Too many different interpretations to calculate.*)			
5)	Full-time Part-time		43 7	50
6)	Was it a *new* course/idea?	Yes	38	51
7)	Was it a *revised* course/idea?	Yes	20	51
8)	Did it include new content?	Yes	39	51
9)	Did it include new course structure?	Yes	45	51
10)	Did it include new educational ideas? methods, delivery, entry and exit points, competency based approaches, etc)	Yes	45	51
11)	Did it include new ideas from industry?	Yes	29	51
12)	Did it include new technology?	Yes	30	51
13)	Did it include new industry practices?	Yes	25	51
14)	Did you see a need for this change? (full comments in Appendix D2)	Yes No	40 9	49
15)	What size was the change?	small medium large	3 13 31	47
16)	How complex was the change?	slightly medium very	5 16 26	47
17)	How much support did you have during the change? (Refer Table 5.3).			49
18)	How to you feel about the innovation? (see Appendix D3)			42

Appendix D2: Answers to question: *Did you see a need for this change?* (N=49)

1) yes
2) yes, all courses need to be dynamic
3) yes, advanced students getting bored, loss of motivation esp 3rd years, slower students not getting enough practice, if a failure occurred no course for extra practice.
4) No
5) yes, existing courses did not fill the needs of employers and excluded many potential students
6) yes, existing computing course had very strong programming bias, needed far more applications bias
7) yes, I had to produce extra work, better techniques in Lathe exercises and extra handouts to cover gaps in information (probably alternative interpretation)
8) yes
9) yes, to enable the introduction of CBT and self pacing
10) yes, the previous syllabus was inappropriate for majority of the student capabilities
11) no (possible wrong interpretation)
12) yes, because of last 3 above
13) yes
14) no, changes were course delivery only, with some minor new content
15) yes, widespread consultation
16) yes, to improve effectiveness of our course (Accounting) in terms of competency based. Industry had very little part in the development apart from IETC
17) No, only a refinement and upgrading of a well structured modular course was needed
18) No, stricter criteria for eligibility of students
19) Yes
20) yes, self pacing enables students to progress at their own pace, previous curriculum students kept at one level
21) yes, the change was a response to changes in the area of industry and an update in technology
22) yes
23) yes, secretarial Administration Techniques. Updated and rewritten by Mary Loton, SE Metro College
24) yes, the old course was many years old with many subjects overlapping
25) yes, national curriculum is essential
26) yes, it was time to move to competency based self paced learning
27) yes, TAFE was not catering for the needs of a particular group
28) yes, to eliminate duplication
29) yes, a core syllabus for the Cert was developed to make student outcomes comparable. Ass Dip modules were developed to provide continuity from Cert to NAATI level l2 interpreter course.
30) yes, due to impact of computerisation in the industry
31) yes, change in the delivery style necessitated change
32) yes, designed to suit semi-skilled workers who were undergoing restructuring
33) yes, need for self pacing, individualised instruction, concrete modules, relevance
34) yes, the concept is good, however you need 1)a complete set of resources on each module, 2) specialist lecturers
35) yes, industry needed a process which allows students to progress through the apprenticeship system in a faster mode

36) yes, introduction of new unit
37) no
38) No, already had a modular system that could change to satisfy the new curriculum
39) yes, much more communication
40) yes, conversion of elec. Apprenticeship to a modular approach (commencing in 1980)
41) yes, necessary to allow new ideas and methodologies in
42) no
43) No, because it is the same course in less hours
44) yes
45) yes
46) yes
47) yes. Due to lack of funds for expensive hardware, a software solution (simulator for electronics) was chosen. *(question misunderstood)*
48) yes, but our input was totally ignored
49) work practices and methods have changed

Appendix D3: Answers to question: *How do you feel about the innovation?*

Positive	Negative	Both, mixed
Very positive- accounts for individual differences, keeps motivation up, allows good students to finish early, allows slow students more time on subject, more responses to explore. We feel the innovation was very successful. Very much needed in TAFE, pleased to be chosen as a pioneer. Very positive. The new flexible course structure has made it more accessible & relevant to a greater number of students and it has given a greater degree of freedom in selection of subjects to teach. It is good provided it is managed well. Happy. New modularised structure is very flexible and easily adaptable for Joondalup delivery system. Pleased - it was necessary and benefits students & TAFE. OK Much of my work is of an ongoing nature improving and occurring all of the time. I wish we could offer more of our modules to a larger variety of students in more languages and more flexible delivery modes (week ends and holidays).	A way to go yet. With more development and support, it could have been the change required to turn the industry around. Innovation is important but I've observed, yet again, a new syllabus with the same content/objectives but with new headings! Not particularly satisfied with the new course structure, and from the feedback from some mature age students in industry, their senior staff also have some reservations. Am still not convinced this method is a better way of teaching course content and assessing. Resources needed, not enough, had to beg, borrow etc Too rushed, lack of development of materials, very poor assessment. Much needed. Implementation very poor. It could have been done better with more time and planning. Resource development and integration was sadly lacking. Poorly conceived with regard to content, involvement and time frame. Frustrated and stressed to the maximum.	The concept and philosophy of the change is good. The actual process was very poor. The implementation and planning lacked any direction or guidance. I like it! The major problem was a lack of time to develop it. Students were being enrolled in the course while staff were trying to come to terms with it. Currently we are trying to maintain the course while attempting to develop it. Good from the point of view that all Australia has a new National standard for first time. However, changes must be made nationally and not locally otherwise the whole system will be undermined and go back to square one. The idea is great but the program requires major changes and the software is unsound with a lot of scope for error in transforming data. Great, but a little trepidous about content and the number of hours allocated in modules could be either too little or too high. No pilot study has been conducted, but I believe that evaluation will occur at a later stage. I enjoyed the development and the teaching of a course relating to new technology. I feel frustrated by the lack of support (or maybe it is just indifference) from the management.

I felt that we are achieving many changes and handling the challenges that come about with change. Its exciting to be involved with a totally new concept. Pleased with the outcome. The new course was time consuming with little help. The course has been delivered with some success. Very good. Works well. More allowances should be made to allow this to happen in other subject areas. Well I'm biased I think. It's great. Allows students to carry out complete lab experiments on electronics on their computers at home.	Like always, like the proverbial duel of the gods, no planning, no piloting, no money, no resource development and little if any staff development - in a word, lousy. I believe as educationalists our reputation is in jeopardy. The reason for this is the implementation of new courses and new teaching modes without sufficient lead time, resources and support. These three elements are essential to enable the lecturer to carry out teaching duties in a professional manner. Frustrated. Not enough time and resources given prior to implementation. Every ... training centre in Australia is “reinventing the wheel”.	The concept was overdue, however the resources to apply to the new courses have been very hard to come by. No time was given to develop lecturer skills on new software. Its a good idea, politically driven by wise men from the east, but where is the money, support, time? [This] program is a positive innovated delivery that creates motivation in students. The self paced program which is linked to CML causes me some concern as many of the younger students are not capable of taking charge of their learning. The innovation is fine. The implementation is disgusting. Change is welcome when justified. I am not convinced this change will work!! TAFE are in the middle and doing their utmost to succeed. At the lecturer level it is frustrating. Hard work but it was worth it.

Appendix D4: Open ended comments
(from pp. 3 & 6 of the questionnaire)

(The numbers refer to the responses in the order in which they were received)

3) Because I have had close association and input in the implementation of course with coordinator, I feel sense of ownership with it & more care about its outcomes. If this happens more satisfactory implementation occurs. I live far from city and it is especially important. that more information is divulged to grass roots level. We always feel we miss out a lot.

   No SESDA accreditation has been obtained to my knowledge. No syllabus rewriting has occurred. Close working with Coordinator has meant I have received up to date knowledge and was able to implement this course reasonably smoothly.

4) Restructuring of TAFE, and the implementation of these modules at the same time, ensured a complete foul up of the interaction of employers, students, lecturers and administration. Implementation of both competency-based training *and* flexible delivery, with our present administration and economic climate, ensured frustration and low morale. After three years we are still waiting for administrative decisions on roll creation, assessment, recording of results and problems of development and delivery.

   We missed a chance to implement a worthwhile innovative system for training future skilled personnel. Modular training very disjointed, some areas repeated over and over, others ignored. Our ability to instruct the required number of students completing different modules without resource mats ensures difficult student/lecturer interaction.

6) We feel that lecturing staff should be fully involved in order to complete their work satisfactorily at all levels. This would ensure that lecturers are able to give students the knowledge and skills required by employers.

   This questionnaire appears to be obvious. All the questions are important. Unfortunately we don't always have the involvement we feel would be beneficial.

7) The easy thing here would have been for me to tick all the "most important" boxes - but in many cases too much information, too much involvement in curriculum development leads to significant compromise. There the desired outcomes are so watered down that they become unrecognisable. In the end the role of the lecturer is to lecture, not to set policy.

8) Lecturers should have input on "what" and "how" is taught and methods used. Industry produces certain goods for profit and may love to see changes made in TAFE to suit their production - training costs time, time is money. TAFE must educate for all needs in Australia as well as local needs. Industry must be prepared to handle their own specialised needs on their own premises or training schools.

   I have never been asked to collect information from my students on my performance as a lecturer or on the course content in [...]. I do not believe it is a good idea to expose pre-vocational students to modules instead of doing Stage 1 to prepare them for modules.

10) The delivery of program varies from college to college. As it is PC based it is difficult to coordinate changes at different campuses, as not everyone receives full story. Having

commenced an approach difficult with the software fragmentation to change without changing students' progress on course.

12) The two areas lacking with the implementation of the new curriculum were 1) staff development was undertaken in over time, 2) no time allowance for development of resources.

15) Do not always get constructive feedback from students or employers. Resources and teaching materials are necessity. Time off to develop resources essential.

Feedback may be through senior person to curriculum team, industry, etc.

19) Another classic case of "Here it is - get on with it!" So much for all that diatribe about dissemination and diffusion we copped during teacher training! The reality could hardly have been more removed from the theory.

20) No time has been allocated to develop new materials for a new subject, other than DOTT.

21) All of above were and are most important! In my study area very, very little action occurred, resulting in chaos now being experienced.

23) The needs analysis is essential as in many areas there is no need for change - we are already training students in an appropriate way and they are being employed based on the current Ad Cert and Ass Dip. It is ESSENTIAL that Management recognise this and do not enforce change simply for the sake of change.

24) Feedback is important, but maybe via informal chats with staff and anecdotal evidence rather than formal meetings.

26) This of course is the ideal situation.

As you can see, many things did not happen. This I believe reduced the effectiveness of the curriculum and resulted in some overlapping of subjects. The project leader also had his own set ideas.

27) *Least important* is the most common response. Lecturers are the most concerned with delivery, yet they are often the least consulted. In my experience curriculum development is based on administrative convenience and not on desired educational outcomes. The new Ass Dip is no exception as the intent was for accreditation at all costs. Content and implementation were secondary. My comments are based on curriculum design and development as at TES we are not yet involved in delivery.

The same comments apply here. TES had no effective input in the development phase. In addition no recognition was given to the fact that all study guides would have to be rewritten. TES still cannot offer all units. My biggest complaint is that the needs of students were not given sufficient consideration.

28) Whilst most of the topics outlined are important in the day to day running of classes, realistically it is understood that this class not occur. The major areas of concern are that there is no input by teaching staff collected prior to the implementation of new programs and staff development before or during is non existent.

The trialing of [this] package would not have been improved by meetings prior to implementation, but staff development on what the package contained (or did not) would have alleviated a considerable amount of stress on both students and teachers if all knew what the content of the course was. None of the above questions took place.

30) Lecturers to be given appropriate time allowances.

31) With a lot of the questions, the answers would be "it all depends"! It depends so much on the subject, whether lecturers conceived whether meetings are useful. A lot of meetings seem such a waste of time! I prefer information by writing & opportunities to make written submission or comments. But some meetings can be useful.

The answers to the two sections are not really comparable because in the first case I thought of lecturers in general, in the second of me as SAL! So I'm not sure that my contribution is at all useful to you.

32) It is critical that the lecturers at the coal face have input and receive feedback to address the needs of industry and their clients.

Unfortunately very little of the preferred situation actually occurred, being in a remote college there was very little discussion with the metropolitan Study Area re the new course. It seemed to be rushed through.

33) It is important that the staff delivering the new course to be involved. Too often new courses are developed that have no content or suitability to the learners because they are being developed by theorists and have no involvement by people on the coal face. Also too often new courses are implemented without staff development to assist staff to be involved in the course and gain knowledge of the objectives and the intent of the course.

34) Resources such as videos, resource books, slides, etc should be made available to all colleges delivering metals modules. Many lecturers simply change the module to suit their current resources. In the case of our study area, country colleges do not have access to [?] or mower engines, or more than a few lathes. Students end up all over the place.

Most decisions and study area meetings are made and held in Perth. I have experienced almost no input regarding curriculum design. Country colleges are merely told of new developments. Sections are sometimes forgotten. Although many items in this part of the questionnaire were considered important they did not actually happen.

35) All very nice. Now convince those who make the decisions. Money is *the* requirement - to allow staff meetings (relief) - to allow for the purchase of much needed physical resources, for return to industry, to pay technicians to build resources, to permit staff to get involved in development of resources and teaching aids.

It happens this way. On Monday morning you will take a class of [...]. You cannot be concerned about what happened prior. Your only concern is to provide a quality service to your students and that means doing the best you can with limited resources.

36) Since joining TAFE I have been disappointed with their professional approach to preparing their own staff to do the job they are employed for. In most cases, you are handed a stack of material and told to deliver it. If you are lucky -you are in a well resourced college

which enables you to devise practical support to what you are expected to present. In my experience every college lacks complete support resource material. Responses & comments only apply to those modules I have taught or been involved with.

39) Answering this was difficult as the actual curriculum used is quite different from that intended by the developers. There was almost a redevelopment at the local level.

40) Answering this section is extremely difficult as I find it hard to be the least bit enthusiastic about how I was involved in the Curriculum Development (Section I). It did not happen. It was thrust on us with virtually no input from lecturers in Western Australia – like it or lump it, here is the stuff from the East! It was badly planned, poorly implemented, under resourced, hard to follow, – a load of garbage rejected by industry and by the union. We in WA have had to develop, rethink and redesign our resource material to fit a course of study which has no clear assessment procedure or validation program, and we've had virtually no staff development. TAFE has been left to carry the can with a course on which industry and the unions have yet to agree – poor TAFE and poor lecturers!

43) Literally we had no input to this new system, no knowledge of it or its implications and no resources until November 1990, when we were told that it would commence in Feb 1991! We are slowly developing resources with minimal funding and no time allowance. We teach courses in Management of change. It is a pity that we do not practise it!

44) In an ideal situation all of the above are extremely important if a new course is to be implemented efficiently. I doubt if this can ever occur - financial reasons always seem to prevail over sure educational objectives and desires.

47) Lecturers need to be more involved in all areas of course development and delivery!

All of the above were important - but unfortunately did not occur during the latest course development.

50) All the above factors in the actual situation were important . But if you are referring to the importance my employer placed on these factors all answers would be 1 or 2.

51) Its generally a case of here are some national modules. Implement them in a new course using CBT descriptors and we want it yesterday. No needs analysis, no market research, no support or time to develop curriculum. Interact with interstate colleges. We have one staff member on IETC, however very little feed back to those involved with new course development. This has to be a major management initiative - failed again! You can't have general managers running study areas.
Money x time x initiative = success.
Some bits of the formula are missing. Can you guess?

52) All of the above are of importance. In the real world, most are totally ignored!

The entire process was (and still is) very frustrating as no input was sought from the staff of this college.

53) One of the major problems associated with the implementation of the national curriculum was that in February 1991 the study area was informed that the program would commence forthwith. No warning, no resources.

Q 1. Being involved in a small study area I was in the “front line”, but as far as needs analysis and results were concerned I had no feedback.
Q 2. Regular meetings were held with industry and unions members re course content during the first two years.
Q. 4. Other than the national broad based modules the industry specific modules had to be developed as we delivered. This has been the situation in each State.
Q 5. I have not been invited to collect feedback from students, however I do ask students to express their views on the course.

Appendix D5: Responses and means of actual and preferred situations (Raw data) *(N = 40)*

Q No Response No	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	2.11
1 Preferred	5	5	5	5	5	5	3	3	3	5	X	5	3	5	3	5	1	5	4	4	2	2	5	3	3	1	5	4	4
1 Actual	5	1	1	5	1	2	1	1	1	5	5	5	1	X	5	5	3	5	1	1	1	1	5	5	5	1	1	1	3
2 Preferred	5	5	5	3	3	5	3	5	5	5	5	5	3	5	5	5	4	5	5	5	5	5	5	5	5	3	4	4	4
2 Actual	5	1	1	1	3	3	1	1	1	1	3	5	1	1	1	2	1	5	1	1	3	1	1	2	2	1	1	1	3
3 Preferred	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
3 Actual	5	4	4	5	5	5	4	4	4	5	5	5	X	4	3	5	3	4	5	5	5	5	5	4	4	X	4	X	4
4 Preferred	5	5	5	4	4	4	4	5	5	4	5	5	4	4	5	5	3	4	5	5	4	4	4	3	3	3	X	4	3
4 Actual	2	2	1	2	2	1	1	1	1	3	3	3	3	3	1	1	1	1	1	1	1	1	2	2	3	3	3	2	2
7 Preferred	5	5	5	2	4	4	2	2	2	5	5	5	2	2	2	4	4	5	4	4	2	2	2	3	3	2	4	4	4
7 Actual	4	4	4	2	2	2	1	2	4	4	4	4	2	2	2	4	4	5	2	2	2	2	4	2	2	1	2	4	4
8 Preferred	5	3	3	5	5	5	3	5	5	5	5	5	4	5	5	5	4	5	5	5	2	3	4	5	4	3	5	4	5
8 Actual	X	X	1	1	1	3	1	1	1	1	X	5	1	1	1	5	5	5	1	1	3	1	X	1	2	1	1	2	1
9 Preferred	5	4	4	4	3	4	2	2	3	4	5	5	3	4	3	3	3	4	3	3	3	2	X	4	5	3	3	5	3
9 Actual	4	3	3	3	3	3	2	1	1	1	3	3	1	2	2	2	1	3	1	1	1	1	2	1	2	1	2	3	2
11 Preferred	5	5	5	5	5	5	4	5	5	4	5	5	4	5	5	4	4	5	2	3	3	3	4	4	4	3	4	4	5
11 Actual	2	1	2	1	1	2	1	1	1	1	3	2	1	3	2	1	1	2	1	1	1	1	1	1	1	1	2	3	1
12 Preferred	5	4	4	5	5	5	4	4	4	4	5	5	4	4	5	5	4	5	5	5	3	3	5	4	5	4	4	4	5
12 Actual	5	4	5	4	4	5	4	3	3	3	3	5	5	4	5	5	4	5	5	5	4	4	5	5	5	4	4	4	5
13 Preferred	5	5	5	5	3	3	4	5	5	5	5	5	4	4	4	5	3	5	4	4	4	3	4	5	5	3	4	5	3
13 Actual	5	5	5	4	2	3	1	3	3	4	5	4	4	4	4	5	4	5	3	2	1	2	3	3	3	2	4	3	2
14 Preferred	4	3	3	2	2	2	2	3	3	3	3	4	1	2	2	2	3	3	4	3	3	3	4	4	4	2	3	3	3
14 Actual	5	2	3	3	3	3	2	3	4	4	5	5	2	3	3	3	4	5	4	2	3	2	5	2	2	2	2	5	4
15 Preferred	5	4	5	4	3	4	5	5	4	5	5	5	5	5	4	4	5	4	5	4	4	3	4	4	3	4	4	4	4
15 Actual	5	3	3	5	3	5	5	5	5	4	5	5	5	4	4	5	5	5	4	4	4	4	4	4	5	4	4	5	5
17 Preferred	5	5	5	5	5	5	4	4	5	5	5	5	3	4	4	4	3	5	3	3	4	3	4	5	5	3	5	5	3
17 Actual	5	5	5	4	3	4	4	3	4	5	5	5	3	4	4	4	3	5	3	3	3	3	3	5	5	3	4	5	3
18 Preferred	4	3	5	3	2	2	1	1	2	3	4	4	3	3	3	4	3	5	3	4	2	2	4	3	4	2	2	3	3
18 Actual	5	4	5	2	2	2	2	2	2	3	4	4	2	2	3	4	2	5	4	4	2	3	3	4	4	2	3	4	3
19 Preferred	5	4	4	3	3	2	3	3	4	4	4	5	5	3	3	4	2	3	3	4	3	2	2	3	2	2	2	4	2
19 Actual	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	1	1	1	1	1	1	1	1	1	2	2
20 Preferred	1	1	1	5	2	4	1	5	5	4	4	5	5	5	5	4	3	5	4	4	4	3	4	5	5	3	5	5	3
20 Actual	3	3	1	3	3	3	3	3	3	3	3	1	5	3	3	3	3	3	4	4	3	3	4	4	3	1	3	3	3
23 Preferred	5	5	5	5	4	4	4	5	5	5	5	4	4	5	5	5	5	5	4	4	4	4	5	5	5	4	4	4	4
23 Actual	5	5	5	5	4	5	4	5	5	4	4	4	3	5	4	4	5	5	5	5	3	3	4	4	5	3	5	5	5
24 Preferred	5	3	5	4	4	4	3	2	3	4	4	4	3	2	3	2	4	4	5	5	3	4	4	2	2	2	3	3	4
24 Actual	4	3	3	2	2	2	1	1	1	2	3	2	1	1	2	2	2	4	2	1	1	1	2	2	3	1	3	2	3
25 Preferred	5	3	5	5	5	5	4	3	5	5	5	5	4	4	4	5	3	5	3	4	5	2	3	3	5	3	5	5	5
25 Actual	5	4	5	4	4	4	2	2	2	5	5	5	3	4	4	3	4	5	3	3	4	2	4	5	5	3	4	5	5
26 Preferred	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
26 Actual	5	3	5	3	3	2	3	4	4	4	4	4	3	4	4	4	3	5	1	1	5	5	5	5	5	1	5	5	5

27 Preferred	5	4	5	3	1	2	4	5	5	5	5	5	3	5	5	4	4	5	5	5	5	5	4	5	5	4	5	5	5	
27 Actual	5	4	4	3	2	1	3	5	5	5	5	5	2	5	4	3	2	5	5	5	5	5	3	5	5	3	5	5	4	
28 Preferred	5	3	4	4	3	3	4	5	5	5	5	5	4	4	4	4	5	5	5	5	5	5	5	5	5	4	3	5	5	
28 Actual	5	3	3	2	2	3	3	5	5	5	5	5	3	4	3	3	5	5	5	5	3	4	3	4	5	3	3	5	5	
31 Preferred	4	4	5	5	4	3	3	3	4	5	5	5	5	4	4	5	4	5	4	4	4	4	5	5	5	4	5	5	5	
31 Actual	5	5	5	5	5	4	4	3	4	5	5	5	5	5	3	3	3	5	3	3	5	5	5	5	5	5	5	5	3	
32 Preferred	5	3	5	5	3	3	3	3	3	4	5	5	1	5	4	3	3	5	3	3	2	2	4	4	5	2	4	4	3	
32 Actual	5	4	4	5	1	1	3	3	3	5	5	5	1	3	3	5	4	5	1	1	3	3	4	4	4	1	2	4	3	
33 Preferred	5	X	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	3	5	4	4	3	3	4	4	
33 Actual	5	3	4	4	4	4	4	4	4	4	5	5	4	3	3	4	4	5	3	3	3	3	3	3	4	3	4	4	4	
34 Preferred	5	4	4	5	3	4	3	2	1	3	5	5	4	5	5	5	5	5	3	3	4	4	5	5	5	3	3	4	5	
34 Actual	4	4	4	5	1	3	1	1	1	4	5	5	2	4	5	5	2	5	1	1	1	1	3	4	4	1	3	5	5	
35 Preferred	5	3	5	5	5	5	4	5	4	5	4	5	5	4	4	5	3	5	5	5	5	4	3	3	4	3	3	4	2	
35 Actual	1	1	1	1	1	1	1	1	1	1	1	5	1	1	5	5	1	1	1	1	1	1	1	1	5	1	1	2	5	
36 Preferred	5	5	5	5	3	3	5	5	5	5	5	5	3	5	5	5	3	5	3	4	4	4	4	4	5	5	4	5	1	
36 Actual	3	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	
37 Preferred	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	5	5	5	5	4	5	5	5	5	5	4	
37 Actual	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	3	4	5	4	5	4	5	4	4	
38 Preferred	5	4	4	3	3	3	3	2	2	3	4	4	2	3	3	3	4	5	4	4	3	3	3	3	4	3	4	4	4	
38 Actual	3	2	2	1	1	1	1	1	1	2	3	4	1	3	3	3	2	4	2	2	2	2	2	3	3	1	3	3	3	
39 Preferred	5	2	X	5	4	4	4	4	4	5	5	5	1	3	3	3	3	4	4	4	3	4	4	4	4	2	2	4	3	
39 Actual	4	4	4	4	3	4	3	3	3	4	4	4	1	1	4	4	1	4	4	3	4	4	4	4	3	1	2	X	X	
40 Preferred	5	3	3	4	4	5	4	3	5	4	5	5	3	4	5	5	4	5	4	4	4	3	3	4	4	3	5	5	5	
40 Actual	5	4	4	1	1	3	2	3	2	2	2	3	1	1	5	5	1	5	1	1	1	1	1	1	1	1	1	1	5	
42 Preferred	5	3	5	4	4	4	4	5	5	5	5	5	4	4	4	4	5	4	4	4	4	4	4	4	5	4	5	5	4	
42 Actual	5	2	4	2	2	2	2	4	4	4	4	4	3	3	3	3	4	5	3	3	3	3	4	3	3	3	4	3	4	
43 Preferred	5	5	5	5	3	3	5	5	5	5	5	5	3	5	5	5	3	5	5	5	5	5	5	5	5	3	5	5	5	
43 Actual	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
44 Preferred	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	
44 Actual	5	5	5	5	1	3	2	2	2	5	5	5	2	3	5	5	5	5	5	5	3	5	5	4	4	5	3	5	2	
45 Preferred	4	3	2	2	2	2	4	4	4	4	3	3	4	2	2	4	4	3	5	5	5	5	4	4	5	5	3	2	3	
45 Actual	3	3	3	3	3	3	3	3	3	2	4	4	3	2	2	3	2	2	5	4	4	3	2	3	3	2	2	2	2	
48 Preferred	5	5	5	5	5	5	4	5	4	4	5	5	X	4	4	5	5	5	5	4	3	3	5	5	5	X	4	5	4	
48 Actual	2	2	2	4	X	4	1	2	2	X	X	X	X	X	X	X	X	X	3	3	3	3	2	4	4	X	4	4	4	
51 Preferred	5	3	3	5	5	5	5	5	5	5	5	5	5	4	4	5	5	5	5	5	5	5	5	5	5	5	5	4	5	
51 Actual	5	3	3	5	5	5	5	5	5	3	3	3	3	2	2	2	2	2	3	2	2	2	3	2	2	2	1	2	2	
52 Preferred	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
52 Actual	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
53 Preferred	5	3	4	5	5	4	5	4	4	5	5	5	3	4	4	5	4	5	3	4	5	5	4	4	3	3	4	4	4	
53 Actual	5	2	3	3	3	2	2	2	2	3	2	2	1	5	1	1	2	1	4	3	5	3	5	5	1	1	2	4	4	
Pref Means	4.8	3.95	4.44	4.35	3.85	4.0	3.75	4.03	4.2	4.53	4.74	4.83	3.69	4.15	4.1	4.35	3.85	4.68	4.18	4.22	3.88	3.65	4.18	4.2	4.38	3.35	4.05	4.33	3.95	
Actual Means	4.05	3.0	3.18	3.03	2.46	2.8	2.3	2.55	2.65	3.21	3.66	3.82	2.32	2.84	3.0	3.35	2.77	3.98	2.7	2.5	2.63	2.53	3.1	3.1	3.25	2.03	2.75	3.29	3.26	

Q No Response No	3.1	3.2	3.3	3.4	3.5	3.6	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	4.10	4.11	5.1	5.2	5.3	5.4	5.5	5.6	5.7
1 Preferred	5	3	3	5	5	5	5	3	5	5	1	4	5	5	5	5	5	5	1	5	5	5	3	2
1 Actual	5	5	1	1	5	5	5	5	X	X	X	5	1	4	4	1	1	X	X	X	X	X	X	X
2 Preferred	5	5	1	5	5	3	5	5	4	5	5	5	4	4	5	5	5	4	5	5	5	5	5	5
2 Actual	1	1	1	3	3	1	1	1	1	2	1	1	3	3	1	1	1	1	1	1	1	1	1	1
3 Preferred	4	4	2	3	5	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
3 Actual	5	X	1	3	4	1	5	5	X	X	X	5	5	3	4	2	5	5	5	5	5	4	3	5
4 Preferred	4	5	5	3	5	3	5	5	4	4	4	5	5	5	4	4	5	4	4	4	4	5	5	3
4 Actual	2	2	2	4	3	1	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	1
7 Preferred	4	4	4	5	4	4	4	2	3	4	4	4	4	4	5	4	2	4	4	4	2	2	4	4
7 Actual	4	4	2	5	4	2	2	2	2	4	4	5	4	4	4	2	1	5	2	2	2	4	2	1
8 Preferred	5	5	5	4	5	X	5	5	5	5	4	5	5	5	3	3	5	X	3	5	X	5	5	3
8 Actual	3	5	1	5	3	1	1	1	1	1	1	1	1	3	1	1	1	5	3	5	4	1	3	2
9 Preferred	5	5	3	2	3	5	4	4	5	4	3	3	1	3	3	2	2	3	2	3	4	5	4	2
9 Actual	3	3	2	4	3	1	2	1	2	2	1	2	1	3	2	1	1	2	1	2	3	3	3	1
11 Preferred	2	5	3	1	4	5	3	4	2	5	2	4	4	5	5	4	4	3	4	3	5	5	4	2
11 Actual	1	1	1	5	3	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	3	2	1	1
12 Preferred	5	5	5	3	5	3	3	5	4	5	3	5	5	5	5	5	5	4	4	4	5	5	5	4
12 Actual	5	1	1	5	5	1	4	4	1	1	1	5	5	5	5	3	5	4	3	4	5	5	5	3
13 Preferred	2	5	2	2	5	5	5	5	5	5	5	4	5	5	5	5	3	3	4	4	5	5	5	5
13 Actual	1	1	1	4	4	1	2	2	2	2	4	4	4	3	3	1	1	4	4	4	1	1	1	1
14 Preferred	5	5	5	5	4	5	4	4	4	4	4	4	5	5	4	4	5	4	4	4	5	4	4	4
14 Actual	3	1	1	5	1	1	2	2	2	3	2	3	2	1	3	1	2	1	1	2	2	2	1	1
15 Preferred	5	5	5	4	5	5	5	5	5	4	4	5	5	5	4	4	5	4	4	5	5	4	4	4
15 Actual	5	5	4	4	4	4	4	5	5	4	5	5	5	5	5	5	5	5	5	5	5	4	4	4
17 Preferred	3	5	5	3	5	3	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	4	3	3
17 Actual	3	5	5	3	4	4	4	5	5	4	3	5	5	5	4	3	5	5	5	5	5	4	3	3
18 Preferred	4	4	3	2	2	3	3	3	2	4	4	4	5	5	4	4	4	3	3	3	3	4	3	2
18 Actual	4	3	5	4	4	4	4	4	3	4	4	4	4	4	3	2	3	3	2	4	4	4	3	2
19 Preferred	4	5	5	1	4	3	2	3	2	1	1	4	3	3	4	2	2	5	5	4	3	3	4	2
19 Actual	1	1	1	5	2	1	1	3	1	1	1	2	1	1	1	1	1	3	1	3	3	2	1	1
20 Preferred	5	5	5	5	5	5	4	4	4	4	4	5	5	5	4	4	4	5	3	3	3	3	3	3
20 Actual	1	1	1	5	1	1	1	1	1	3	1	1	1	1	1	1	1	5	1	5	1	1	1	1
23 Preferred	5	4	5	4	4	3	5	4	4	3	3	3	3	3	4	3	4	4	5	4	4	5	5	4
23 Actual	3	3	3	5	4	1	5	3	3	2	2	3	3	3	4	2	2	2	4	4	4	4	2	1
24 Preferred	4	5	2	3	4	4	2	2	3	4	2	4	5	5	4	4	2	3	4	3	4	3	3	3
24 Actual	1	1	3	5	3	1	2	1	1	3	2	3	1	1	1	1	1	1	1	3	2	3	1	1
25 Preferred	5	5	5	5	4	5	5	4	4	4	1	5	5	5	5	5	4	5	5	5	5	5	4	4
25 Actual	5	5	5	5	3	4	4	5	4	4	2	4	5	5	4	3	2	5	5	4	5	5	4	4
26 Preferred	5	5	5	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
26 Actual	1	1	1	5	1	1	1	4	1	4	5	4	3	1	4	1	1	1	1	5	5	1	1	1

27 Preferred	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	3	4	5	5	5	3	
27 Actual	4	5	4	4	4	5	5	4	5	5	3	4	4	4	4	3	5	4	3	5	5	5	3	3	
28 Preferred	5	3	2	2	5	4	5	5	5	4	5	4	5	5	4	4	5	5	5	5	5	4	4	4	
28 Actual	5	5	3	5	5	3	5	5	5	4	5	5	5	5	3	3	5	5	5	5	5	4	4	4	
31 Preferred	3	4	4	4	5	5	5	3	3	3	1	2	2	3	3	3	3	5	5	4	3	3	3	3	
31 Actual	3	3	3	4	3	3	4	3	3	4	3	3	4	4	4	3	4	5	5	5	3	3	3	4	
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32 Actual	4	1	2	3	3	1	5	3	4	4	4	3	3	3	3	2	2	3	3	3	4	4	1	1	
33 Preferred	3	4	3	3	4	5	5	5	4	4	4	4	4	5	5	5	4	4	4	5	4	4	4	4	
33 Actual	1	2	3	1	2	4	4	4	4	4	4	5	4	5	5	3	5	4	2	3	4	4	2	2	
34 Preferred	5	5	4	4	5	2	4	5	5	5	5	5	5	5	5	4	5	3	4	5	5	5	4	3	
34 Actual	5	5	1	5	5	1	5	5	5	3	2	5	1	1	2	2	5	3	1	4	4	4	1	1	
35 Preferred	5	5	5	3	5	5	4	4	5	4	4	5	3	3	5	5	5	5	5	5	5	5	5	5	
35 Actual	1	1	1	5	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	2	2	1	1	
36 Preferred	5	5	5	2	5	5	5	5	5	5	3	5	5	5	5	5	5	3	3	4	5	5	5	5	
36 Actual	1	1	1	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
37 Preferred	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	
37 Actual	5	1	4	4	4	1	5	4	5	5	5	5	5	5	5	2	5	4	3	5	5	5	5	4	
38 Preferred	4	4	4	4	3	3	4	4	4	4	4	3	4	4	3	3	4	5	5	5	4	5	5	5	
38 Actual	2	1	1	2	1	1	1	1	1	2	2	2	2	1	1	2	2	2	2	1	2	1	1	1	
39 Preferred	3	4	3	3	4	5	4	4	4	4	2	4	3	4	4	2	4	4	4	4	4	4	3	3	
39 Actual	4	4	4	3	5	3	4	4	4	3	4	4	3	4	4	3	5	5	4	4	5	4	3	2	
40 Preferred	5	4	5	2	4	3	4	5	5	4	4	4	4	4	4	4	5	4	4	4	5	5	5	5	
40 Actual	1	1	1	5	5	1	1	1	1	1	1	3	2	1	1	2	1	1	1	5	4	4	1	1	
42 Preferred	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	
42 Actual	5	5	4	5	3	4	4	3	2	2	2	3	4	3	4	2	3	5	5	4	3	4	3	2	
43 Preferred	3	5	5	5	5	5	5	3	3	3	3	2	4	4	5	5	5	5	5	5	5	5	5	5	
43 Actual	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
44 Preferred	5	5	3	3	5	3	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	
44 Actual	2	5	3	3	4	3	5	5	5	5	5	5	5	5	5	4	4	4	4	5	5	5	5	4	
45 Preferred	3	4	5	5	5	5	1	3	3	3	3	3	5	5	4	5	3	5	5	4	5	5	4	5	
45 Actual	3	2	2	2	5	2	1	1	1	2	1	2	4	4	3	4	3	4	4	4	4	3	3	3	
48 Preferred	4	5	3	2	5	3	5	5	5	5	4	4	4	4	5	5	5	5	4	4	5	5	5	3	
48 Actual	3	1	1	4	1	X	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
51 Preferred	5	5	5	3	4	1	5	5	5	2	2	3	3	4	5	5	5	4	5	2	5	5	5	5	
51 Actual	2	4	4	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	1	
52 Preferred	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
52 Actual	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
53 Preferred	5	4	4	4	4	4	4	5	4	4	4	5	5	5	4	5	5	5	5	5	5	5	5	5	
53 Actual	1	1	2	5	1	1	1	2	2	2	2	1	2	2	3	2	2	1	1	2	2	2	2	4	
Pref Means	4.33	4.63	3.98	3.38	4.5	4.08	4.3	4.28	4.22	4.18	3.65	4.22	4.3	4.53	4.45	4.25	4.33	4.33	4.25	4.3	4.54	4.55	4.35	3.88	
Actual Means	2.78	2.54	2.2	3.98	3.13	1.92	2.73	2.7	2.42	2.63	2.45	3.05	2.83	2.8	2.78	1.98	2.5	3	2.51	3.38	3.21	2.95	2.23	1.97	

Appendix D6: Restatement of questions as statements of lecturer needs

Question	Statement of need
1. Information on curriculum development: How important was it that you were informed about	
1.1 a major curriculum innovation beginning in your study area	Information on a major curriculum innovation about to begin in study area
1.2 minor revision being planned in your study area	Information on minor revision being planned in their study area
1.3 any revisions being planned in your *subject*	Information on any revisions being planned in their *subject*
1.4 who the Project leader was	Information on who the Project leader is
1.5 who the Curriculum Officer was	Information on who the Curriculum Officer is
1.6 which senior TAFE staff were involved	Information on which senior TAFE staff are involved
1.7 who the industry representatives were	Information on who the industry representatives are
1.8 what sort of needs analysis was done	Information on what sort of needs analysis was done
1.9 the results of the needs analysis	Information on the results of the needs analysis
1.10 design decisions (shape and structure of the course)	Information on design decisions (shape and structure of the course)
1.11 changes in content planned for the new course	Information on changes in content planned for the new course
1.12 educational changes planned for course (methods, delivery, entry and exit points, competency based etc)	Information on educational changes planned for course
1.13 the completed SESDA accreditation documents	Information on the completed SESDA accreditation documents
1.14 who was developing your subject syllabuses	Information on who is developing the subject syllabuses
1.15 who was developing other resources	Information on who is developing other resources
1.16 plans for new equipment and materials	Information on plans for new equipment and materials
1.17 plans for staffing, student market, funding etc.	Information on plans for staffing, student market, funding etc
1.18 when the new course was planned to begin	Information on when the new course is planned to begin
2. Involvement in curriculum development: How important was it that you were invited to	
2.1 give input to a needs analysis	Involvement in the needs analysis
2.2 comment on the results of a needs analysis	Involvement in comment on the results of a needs analysis
2.3 communicate with the industry representatives involved in curriculum development	Communication with industry representatives involved in curriculum development
2.4 communicate with the development team on industry related matters	Communication with the development team on industry related matters
2.5 communicate with the Project leader expressing your interest in the project	Communication with Project leader to express interest in the project

2.6 participate in decision making about the design and structure of the course	Participation in decision making about the design of the course
2.7 participate in decision making about the learning outcomes of the course	Participation in decision making about learning outcomes of the course
2.8 participate in discussion of SESDA accreditation documents and give input	Participation in discussion of SESDA accreditation documents and giving input
2.9 participate in syllabus writing (especially competencies)	Participation in syllabus writing (especially competencies)
2.10 discuss completed syllabus documents and give input	Participation in discussion of completed syllabus documents and giving input
2.11 volunteer for participation in resource development	Voluntary participation in resource development
3. Resource development:How important was it that	
3.1 the curriculum team developed resources and teaching materials	Information on the curriculum team's plans for developing resources and teaching materials
3.2 you were given time off teaching to develop teaching materials for the team	Time off teaching given to develop teaching materials for the team
3.3 you nominated someone from your study area to develop teaching materials	Nomination of someone from study area to develop teaching materials
3.4 you developed your own materials using the completed syllabus documents	Development of own materials using completed syllabus documents
3.5 you saw and discussed other people's teaching materials	Opportunities to see and discuss other people's teaching materials
3.6 common resource materials were developed in conjunction with TESC or Joondalup	Common resource materials to be developed with TESC or Joondalup
4. Staff development: How important was it that	
4.1 you were kept informed in writing of all major decisions throughout the development process	Information in writing of all major decisions throughout development
4.2 staff development meetings were held throughout the development process to discuss the major decisions	Staff development meetings be held throughout to discuss the major decisions
4.3 staff development meetings were able to change the curriculum documents before accreditation	Staff development meetings to change the curriculum documents before accreditation
4.4 staff development meetings were held after accreditation so that you could discuss the new documents	Staff development meetings be held after accreditation to discuss new documents
4.5 staff development meetings were able to change the syllabus documents after accreditation	Staff development meetings to change the syllabus documents after accreditation
4.6 staff development meetings devised an implementation plan	Staff development meetings devise an implementation plan
4.7 staff development meetings were devoted to new content (knowledge)	Staff development meetings be devoted to any new content (knowledge)
4.8 staff development meetings were devoted to new skills development	Staff development meetings be devoted to any new skills development
4.9 some staff development meetings included the members of the development team	Some staff development meetings to include the members of the development team
4.10 some staff development meetings included industry representatives involved in the curriculum development	Some staff development meetings include industry representatives on team

4.11 the minutes of staff development meetings were made available to all involved in implementing the new course	Availability of minutes of curriculum development meetings to all implementers
5. Formative evaluation and feedback on implementation: How important was it that you were invited to	
5.1 collect feedback from students	Participation in feedback by collecting feedback from students
5.2 collect feedback from employers of students	Participation in feedback from employers of students
5.3 collect data of your own experiences and opinions about teaching the course	Participation in feedback on their own experiences and opinions about teaching the course
5.4 attend staff meetings to share and discuss data	Staff development meetings to share and discuss data
5.5 attend meetings with senior staff to give feedback	Staff development meetings with senior staff to give feedback
5.6 attend meeting with the curriculum team to give feedback	Staff development meeting with the curriculum team to give feedback
5.7 attend meeting with industry representatives to give feedback	Staff development meeting with industry representatives to give feedback

Appendix D7: Statements ranked in order of difference between preferred and actual situations

Qu No	Item	Pref Mean	Act Mean	SD Diff
3.2	Time off teaching given to develop teaching materials for the team	4.6	2.5	1.1
1.12	Information on educational changes planned for course	4.8	3.8	0.9
1.18	Information on when the new course is planned to begin	4.7	4.0	0.9
4.8	Staff development meetings be devoted to any new skills development	4.5	2.8	0.9
5.1	Participation in feedback by collecting feedback from students	4.3	2.9	0.9
1.10	Information on design decisions (shape and structure of the course)	4.5	3.2	0.8
1.11	Information on changes in content planned for the new course	4.7	3.6	0.8
2.2	Involvement in comment on the results of a needs analysis	4.2	2.5	0.8
2.10	Participation in discussion of completed syllabus documents and giving input	4.3	3.3	0.8
4.9	Some staff development meetings to include the members of the development team	4.5	2.8	0.8
5.2	Participation in feedback from employers of students	4.3	2.5	0.8
5.3	Participation in feedback on their own experiences and opinions about teaching the course	4.9	3.4	0.8
1.1	Information on a major curriculum innovation about to begin in study area	4.8	4.1	0.7
2.1	Involvement in the needs analysis	4.2	2.7	0.7
2.5	Communication with Project leader to express interest in the project	4.2	3.1	0.7
3.1	Information on the curriculum team's plans for developing resources and teaching materials	4.3	2.8	0.7
3.5	Opportunities to see and discuss other people's teaching materials	4.5	3.1	0.7
4.1	Information in writing of all major decisions throughout development	4.3	2.7	0.7
4.2	Staff development meetings be held throughout to discuss the major decisions	4.3	2.7	0.7
4.6	Staff development meetings devise an implementation plan	4.2	3.2	0.7
4.11	Availability of minutes of curriculum development meetings to all implementers	4.3	2.5	0.7
5.4	Staff development meetings to share and discuss data	4.5	3.2	0.7
2.6	Participation in decision making about the design of the course	4.2	3.1	0.6
2.7	Participation in decision making about learning outcomes of the course	4.4	3.3	0.6
4.3	Staff development meetings to change the curriculum documents before accreditation	4.2	2.4	0.6
4.7	Staff development meetings be devoted to any new content (knowledge)	4.3	2.8	0.6
5.5	Staff development meetings with senior staff to give feedback	4.5	2.9	0.6
5.6	Staff development meeting with the curriculum team to give feedback	4.4	2.2	0.6
1.3	Information on any revisions being planned in their *subject*	4.4	3.2	0.5
1.4	Information on who the Project leader is	4.4	3.0	0.5
1.16	Information on plans for new equipment and materials	4.3	3.3	0.5
4.4	Staff development meetings be held after accreditation to discuss new documents	4.1	2.6	0.5
1.9	Information on the results of the needs analysis	4.2	2.7	0.4
1.14	Information on who is developing the subject syllabuses	4.1	2.8	0.4
1.15	Information on who is developing other resources	4.1	3.0	0.4
1.17	Information on plans for staffing, student market, funding etc	3.8	2.8	0.4
2.3	Communication with industry representatives involved in curriculum development	3.9	2.6	0.4

2.9	Participate in syllabus writing (especially competencies)	4.0	2.7	0.4
2.11	Voluntary participation in resource development	4.0	3.3	0.4
1.2	Information on minor revision being planned in their study area	4.0	3.0	0.3
1.6	Information on which senior TAFE staff are involved	4.0	2.8	0.3
2.4	Communication with the development team on industry related matters	3.7	2.5	0.3
3.6	Common resource materials to be developed with TESC or Joondalup	4.1	1.9	0.3
4.5	Staff development meetings to change the syllabus documents after accreditation	3.7	2.4	0.3
5.7	Staff development meeting with industry representatives to give feedback	3.9	2.0	0.3
1.5	Information on who the Curriculum Officer is	3.8	2.5	0.2
1.7	Information on who the industry representatives are	3.8	2.3	0.2
1.8	Information on what sort of needs analysis was done	4.0	2.6	0.2
1.13	Information on the completed SESDA accreditation documents	3.7	2.3	0.2
2.8	Participation in discussion of SESDA accreditation documents and giving input	3.3	2.0	0.2
4.10	Some staff development meetings include industry representatives on team	4.3	2.0	0.2
3.3	Nomination of someone from study area to develop teaching materials	4.0	2.2	0.1
3.4	Development of own materials using completed syllabus documents	3.4	4.0	0.1

Appendices E1 - E8: The dissemination strategy

Appendix E1: The Australian Standards Framework (ASF)

(Source: ACTRAC, l992, 5–3 to 6)

Following are the eight competency levels of the ASF. They serve as reference points for the development and recognition of competency standards required in particular industries and occupations.

Level 1 The person has an established work orientation, and the knowledge and skills required to perform routine, predictable, repetitive and procedurised tasks, involving very limited theoretical knowledge and motor skills, and under close supervision.

This level corresponds to a competent operative or service sector worker.
Current preparation for employment at this level is generally obtained through job specific training, mainly in the workplace, which may be certified by appropriate authorities.

Level 2 The person has an established work orientation, and the knowledge, skills and demonstrated capacity to perform proceduralised tasks under general supervision and more complex tasks involving the use of theoretical knowledge and motor skills under close supervision.

This level corresponds to an advanced operative or service sector worker.

Current preparation for employment at this level is generally obtained through job specific or general training which may be certified by appropriate authorities.

Level 3 The person has an established work orientation, and the knowledge, skills and demonstrated capacity for self-directed application (including the selection and use of appropriate techniques and equipment) required to perform tasks of some complexity involving the use of applied theoretical knowledge and motor skills.

This level corresponds to a competent skilled autonomous worker.
Current courses of formal vocational education and training available to assist in preparing for employment at this level generally are those leading to a trade certificate or equivalent in non-trade occupation.

Level 4 The person has highly developed knowledge, skill and capacity for self-directed application (including the selection and use of appropriate techniques and equipment) required to perform highly complex tasks involving substantial applied theoretical knowledge and motor skills. May perform complex tasks without supervision or engage in some supervision of the work of others.

The level corresponds to an advanced skilled autonomous worker.

Current courses of formal vocational education and training available to assist in preparing for employment at this level generally are those leading to initial post-trade or equivalent certificates. In some states or occupations existing advanced certificates or equivalent may apply.

Level 5 The person has an established work orientation, and the knowledge, skills and demonstrated capacity for self-directed application (including the selection and use of appropriate techniques and equipment) required to perform tasks involving

independent use of a high degree of technical or applied theoretical knowledge, possibly in combination with developed motor skills.

May undertake limited creative, planning, design or supervisory functions.
This level corresponds to a competent administrator, specialist, technician or paraprofessional.
Current courses of formal vocational education and training available to assist in preparing for employment at this level generally are those leading to an advanced certificate. In some States or occupations, existing associate diplomas, diplomas or their equivalent may apply.

Level 6 The person has a developed capacity to make autonomous use of a high degree of applied theoretical knowledge in combination with mastery of the theoretical bases of that applied knowledge. Tasks may require developed motor skills. May undertake significant creative, planning, designing or supervisory functions related to products, services operations or processes.

This level corresponds to a competent senior administrator, specialist, technologist or paraprofessional.

Current courses of formal vocational education and training available to assist in preparing for employment at this level generally are those leading to an associate diploma or a diploma. In some states or occupations a degree may apply.

Level 7 The person has a highly developed capacity to make autonomous use of a high level of theoretical and applied knowledge. Tasks may require developed motor skills. May undertake significant high level creative planning, design or management functions and may have substantial accountability and responsibility for the output of others.

This level corresponds to a competent professional or manager.

Current courses of formal vocational education and training available to assist in preparing for employment at this level generally are those leading to a degree or higher degree.

Level 8 The person has a highly developed capacity to generate and use a high level of theoretical and applied knowledge. Tasks may require highly developed motor skills. May undertake complex and major high level creative planning, design or managerial functions with full accountability and responsibility for the output of others.

This level corresponds to a competent senior professional or manager.

Current courses of formal vocational education and training available to assist in preparing for employment at this level generally are those leading to an appropriate degree of higher degree. Professional qualifications may also include postdoctoral research and evidence of publications which make a substantial contribution to knowledge.

Appendix E2: Meeting agenda for four meetings

New Certificate of Horticultural Skills

Staff Development Meeting

9 am to 12.30

Friday 13 May

South Metropolitan College of TAFE
Murdoch Campus, Murdoch Drive

Agenda

9.00 to 9.45	**Introduction to the project** • The new CBT course • The pilot course • Main changes in the new course • The research project
9.45 to 10.15	**The pilot course - Panel discussion** • Comments from lecturers • Questions
10.15 to 10.45	**Morning tea**
10.45 to 11.15	**Outline of the development plan** Questions
11.15 to 12.15	**Workshops on teaching materials** • *Describing and using plants* • *Horticultural safety* • *Soils and watering* • *Machinery and tools* • *Gardening fieldwork*
12.15 to 12.30	**Plan of development work for next six weeks**

The next Staff Development meeting will be on Friday June 24.
Please write this in your diary.

SOUTH METROPOLITAN COLLEGE OF TAFE
(MURDOCH CAMPUS)

HORTICULTURE STUDY AREA MEETING

SOUTH WEST COLLEGE (BUNBURY CAMPUS)

27th May 1994

AGENDA

9.00 am	WELCOME AND INTRODUCTIONS
9.15 am	COURSE DISSEMINATION PROJECT Clare McBeath
9.45 am	RPL PROCEDURES - STUDY AREA Chris Oliver
10.15	*Morning tea*
10.30	COURSES AND CURRICULUM Chris Oliver
11.00 am	SUBJECT RESOURCE CENTRE (CBT) Arthur Lobo
12.00	*Lunch*
1.00 pm	TOUR OF FACILITIES - BUNBURY Dave Forrest
1.30pm	WORKSHOP: TASK FORCE CONSULTATION FOR COUNTRY COLLEGES Dave Forrest, Neil Binney, Eva Pervan
2.30 pm	WORKSHOP Networking under autonomy? CBT Assessment
4.00 pm	Finish

New Certificate of Horticultural Skills

Staff Development Meeting

9 am to 12.30

Friday 24 June

South Metropolitan College of TAFE
Murdoch Campus, Murdoch Drive

Agenda

9.00 to 9.45	**Overview of the Bunbury meeting** • articulation • assessment • the role of the lecturer
9.45 - 10.15	**Guidelines for teachers** • significance for the Basic Skills course
10.15 to 10.45	**Morning tea**
10.45 to 11.15	**Development of teaching materials** • Reports from teaching areas • What else is needed? • The format of final document • Any problems with equipment or resources?
11.15 to 12.15	**Record keeping procedures** • The Docking method • The NATAS method • The Metals method • The Horticulture method
12.15 to 12.30	**Plan of development work for next five weeks** • Are we to have another meeting in this series?

HORTICULTURE STUDY AREA MEETING

VENUE: Midlands Regional college of TAFE

DATE: 19TH August 1994

A G E N D A

8.45 am	Welcome
9.00 am	Development of Teaching Materials for CT Horticultural Skills *(Clare McBeath)*
9.30 am	TV Presentation Strategies (Plant Structure) *(Elizabeth King)*
10.00 am	MORNING TEA
10.15 am	Curriculum Trends IETC *(Chris Oliver)*
10.30 am	Workshop - Curriculum Directions Recommended by Study Area to IETC *(Group)*
12.00 Noon	LUNCH
1.00 pm	Tour of Facilities - Midland *(Doug Monk)*
1.30 pm	Workshop - Task Force Consultation for Country Colleges (15 mins each) Bunbury, Albany, Geraldton, Margaret River
2.30 pm	AFTERNOON TEA
2.45 pm	Study Area Issues - Discussion/Recommendations Networking Under Autonomy CBT Matters
3.30 pm	CLOSE

c:studmeet.aug

Appendix E3: The Newsletters

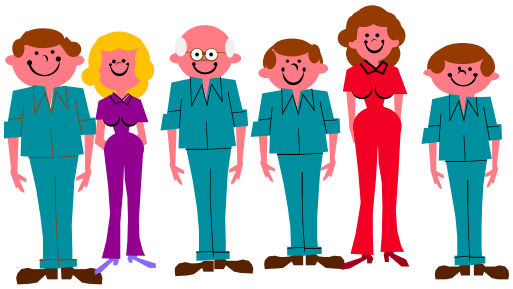
Certificate of Horticultural Skills

Project Newsletter

No 1: April 1994

The new Certificate of Horticultural Skills has just been accredited and will be introduced in a number of TAFE colleges this year and next.

This is Western Australia's first competency based training course in horticulture, and is rather special in a number of ways. It has been selected to test a model of curriculum development, whereby instructors will participate in collaborative development of instructional materials and will control jointly what the course will look like when it is implemented. Also, it is to be part of a Curtin University research project. It has the support and financial backing of Curriculum Services.



Five course subjects are being piloted with a class of 12 students at Murdoch campus this semester, and the complete course is planned to run at the Murdoch site in the second semester, beginning on July 25.

What will this mean to you?

It is important to realise that the Certificate of Horticultural Skills curriculum document which has been sent to the colleges is not yet a teaching syllabus. What you have been given is an outline, a structure and a standard for the course, set out according to the requirements of the IETC and SSAB. This gives the big picture of what the course will look like.

There is still a lot of curriculum development needed to turn it into a useful and useable teaching program. This is where you come in.

The lecturers who will be teaching the course next semester will be given time to become involved in interpreting the course and developing it into suitable teaching materials. This will not be done in isolation, with each lecturer "reinventing the wheel", for each individual subject.

We would like this to become a collaborative process, so that all interested lecturers can be involved in some way if they wish, and be able to share and discuss their ideas with other lecturers. In this way everyone will become familiar with the requirements of the new course before you have to put it into practice.

We hope also that this approach will increase your interest in the process of innovation, and that you will feel that your input is important and that you are being listened to. We would like it to become *your* project, and *your* course.

Who will be involved?

We envisage a Network of lecturers, where everybody concerned is available on the telephone and has time to talk about how the course could be taught. We want you to feel that you can talk to each other and to discuss your thoughts, successes and anxieties as the teaching materials are being developed.

The following people are the central members of the Certificate of Horticultural Skills development team. Remember that they need your ideas as much as you may want to give input.

Study Area Leader
Chris Oliver
Telephone: 310 9244

Staff development officer
Eric Wigget
Telephone: 430 6123

CBT coordinator
Lyn Petani
Telephone: 235 6192

Lecturers involved in materials development project, April to July, 1994

Murdoch campus (Tel 310 9244)

- Christine Cooper, *Describing and using plants*
- Alan Batt, *Horticultural safety*
- Eric Crump, *Soils and watering*
- Steve Dargie, *Machinery and tools*
- Barry Duckett, *Basic First Aid*
- Kevin Wass, *Workplace Communication*
- Jocelyn Shirley, *Writing skills for work*
- Chris Oliver, *Gardening Fieldwork*

We were hoping to have other colleges involved, but this has not been possible. There are other fieldwork subjects to develop and we will need ideas from outside the official development team.The more grass-roots, or "bottom up" input there is, the better. If you are interested, and would like to volunteer to attend one or both of the development meetings, please talk to your senior lecturer, and see if you can get release.

If you cannot attend meetings, you can telephone anyone on the team on the Murdoch number. Or you may share ideas through this Newsletter.

Researcher: Clare McBeath (Tel 450 2806)

Clare is from Curtin University of Technology, and some of you may know her from your teacher training days. She and Chris have just met again, many years since working together on the National Curriculum Project on Horticultural Apprenticeships in the early 1980s. She will be attending meetings, administering questionnaires and collecting ideas for this Newsletter, as part of her research into curriculum change.

What will you have to do?

Project team members will attend staff meetings and will be responsible for developing teaching materials to be used, not just by themselves, but by the other horticulture lecturers in Western Australia.

Five lecturers have already been involved in the pilot program at Murdoch campus, and have experimented with a number of ideas. The main challenge will be in the competency based training area, and in interpreting what this means in terms of assessment.

We would like to see some imaginative approaches to assessment coming out of the project. There is never one way of doing things, and we believe that by discussing and sharing various approaches to group and individual testing, we could come up with a dynamic course, and possibly a model for other CBT courses and even for other States.

Program

Staff development meetings have been planned for May 13 and June 24. The agenda for the first meeting has gone out, and you may request a copy if you are interested. We will let you know the agenda for the next meeting in due course, but in the meanwhile, please pencil these days in your diary.

We are very aware of the needs of staff at rural colleges. We realise that you are not easily able to participate directly in the all-important decisions. We appreciate that you are often amongst the last to be considered, and this is of some concern.

However, we would like you to be involved as far as possible. We will publish this Newsletter regularly over the next four or five months and send it to all those people in rural colleges who may be involved in this course in the future. We want you to know what is going on, but we also want you to take some ownership of the course and feel free to communicate your ideas with any of the people on the team listed on this page.

Certificate of Horticultural Skills

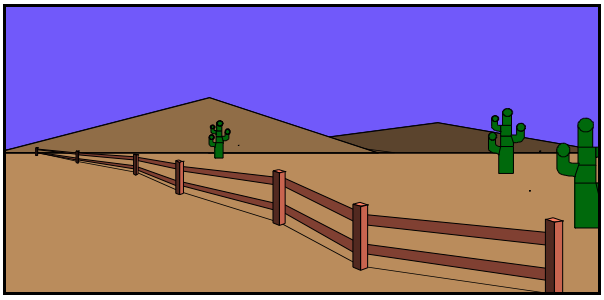
Project Newsletter

No 2: May 1994

The first meeting on the new Certificate of Horticulture Skills was held at the new Murdoch campus on 13 May. Some of the participants have been involved in the pilot course and were able to share some of their experiences, especially on assessing the new competencies.

Some reported a few little problems in a couple of the subjects, and the meeting discussed the importance of being able to have changes made after the course has been accredited. This is very difficult under the new guidelines. IETC decisions are not negotiable. However it is considered important that somebody collect and record feedback from all lecturers as they try out the various subjects. All feedback from the new course needs to be presented to the IETC as part of its monitoring and evaluation process.

This mechanism needs to be set up early, and we will look at it at the next meeting.



New Murdoch campus!
(Only joking! Ed.)

The participants were anxious to see the network working as planned, and would like other lecturers to ring and talk to them about developing the new subjects into teaching materials. They will probably take on much of the work, but they don't want to do it in isolation, or without a free exchange of ideas with other people who will be using the course.

Reports from the pilot course

Alan Batt has been working on the *Horticultural Safety* pilot course. He was using a book of exercises written by Doug Monk and found it suitable for the new course. However, *Horticultural Safety* has been written more as a theoretical subject, and Alan has had to devise some practical strategies to keep the students active and motivated.

You might like to consider whether safety competencies should have been spread across all the subjects rather than written into a single subject. Students can't actually perform "being safe" out of context!

Chris Oliver has been teaching *Fieldwork - Gardening*. He has emphasised a project approach, with group assessment. With the projects, a number of competencies are repeated, and Chris has had to work out a system of keeping fairly complex assessment records. He will show us these at the next meeting.

Kevin Wass has been teaching *Workplace Communication*, which is one of the National Communication Skills subjects. He is not a horticultural lecturer, but has approached the assessment of tasks by using the activities students are doing in horticultural subjects and basing the communication exercises on them.

Jocelyn Shirley will begin teaching *Writing Skills For Work* next semester, and the meeting discussed some competency based assessment strategies she may want to use.

Christine Cooper is about to start preparing *Describing and Using Plants* in competency based format and will teach it next semester.

Your role in the project

A number of you will be attending the meeting at Bunbury on May 27. The Certificate of Horticultural Skills dissemination project will be mentioned again at this meeting, and a further invitation offered to lecturers to become involved in the development of teaching materials.

We will emphasise again that funds are available for staff release and travel for staff to attend the project meetings, although we realise that this is not always feasible with busy time-tables and overworked lecturers!

Another view of new Murdoch campus!
(I don't have much clipart on my computer! Ed).

However, if you can't attend meetings but want to have some ownership of the new course, you are strongly encouraged to get on the telephone and discuss your ideas with the appropriate coordinating person. The list of coordinators is similar to that in the last Newsletter.

- Chris Oliver, *Fieldwork - Gardening*
- Christine Cooper, *Describing and using plants*
- Alan Batt, *Horticultural safety*
- Eric Crump, *Soils and watering*
- Steve Dargie, *Machinery and tools*
- Barry Duckett, *Basic First Aid*
- Kevin Wass, *Workplace Communication*
- Jocelyn Shirley, *Writing skills for work*
- Elizabeth King, *General*

There are still coordinators needed for the four electives.

- *Fieldwork - Production Horticulture*
- *Fieldwork - Lawn and Turf*
- *Fieldwork - Nursery*
- *Fieldwork - Landscaping*

Anyone interested please ring Chris.

The IETC Coordinator reports that the course is expected to run at Murdoch, Midlands, Fremantle, and Geraldton. We have also heard that Karratha, Margaret River and Denmark are interested and that it may run also in some secondary schools and in Skills Share. You may be interested to know that a similar course has been accredited for Aboriginal communities and will run at Wiluna, Medina, Pundulmurra Hedland and Broome

The next project meeting

The next meeting will be held at the Murdoch campus at 9 am on 24 June. Please let Study Area Leader Chris Oliver know on 310 9244 if you can be there. If Chris is busy, you can leave a message with Lillian.

The meeting will look at the assessment procedures suggested by the coordinators for each subject. A possible State wide assessment record keeping procedure will also be discussed.

The research

You will remember that this is part of a Curtin University research project. In a few weeks time some of you will receive a questionnaire in the post. It will be sent to lecturers who will be, or may be, teaching this new course within the next year. Of course it is not possible to know for sure who will be teaching it or not, but we will do our best.

If you receive a questionnaire, please answer the questions to the best of your ability and return it in the reply paid envelope.

Telephone numbers

Chris Oliver	(09) 310 9244
Christine Cooper	(09) 310 9244
Alan Batt	(09) 310 9244
Eric Crump	(09) 310 9244
Steve Dargie	(09) 310 9244
Jocelyn Shirley	(09) 310 9244
Barry Duckett	(09) 336 8839
Kevin Wass	(09) 336 8295
Elizabeth King	(09) 227 3406
Clare McBeath	(09) 450 2806

Certificate of Horticultural Skills

Project Newsletter

No 3, June 1994

The Horticulture meeting at Bunbury on 27 May attracted TAFE lecturing staff from Murdoch Campus, Midlands College, Manjimup Regional Centre, South West College of TAFE, Margaret River Campus and Kununurra Regional Centre.

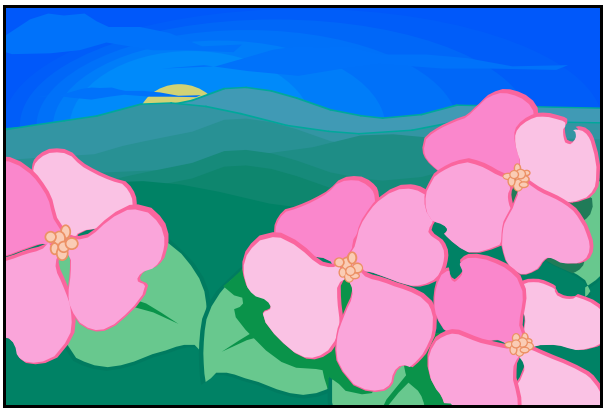
There was a video conference line open to Geraldton Regional College, and Eva Pervan and Rod Davies were able to join in the discussion. Two teachers from Harvey Agricultural High School were also there.

A number of the issues discussed at this full day meeting were relevant to the introduction of the new Horticultural Basic Skills course.

Three themes which kept recurring during the discussions of the day were

- the role of the teacher in CBT
- assessment and recording of competencies
- articulation

The importance of the "network" concept as a way of preparing for the new course was also a popular topic.



Quiz question: Identify these flowers

Hint: They are pink

[I think they are pink sour-sobs. Ed.]

The role of the teacher in CBT

There was some discussion along the lines of "What does the National Training Board and the IETC want us to do with this new CBT based course? Are they going to enforce changes on our teaching styles which we will find difficult to accept? Are they going to check on what we do? Are they going to expect us to account for every learning outcome and every criterion?"

The answer to these questions is that the people on the National Training Board and the IETC are not teachers, and normally know very little about teaching. What goes on in TAFE institutions is to them something like a "black box" where all sorts of miracles occur, and from which students emerge all neatly trained, and ready for work!

This is where TAFE lecturers can empower themselves within the current restructuring process. Lecturers know about teaching, about assessment and about students, and they know how to deal with these things on a daily basis. Neither the National Training Board, nor the IETC, are going to interfere with how we do our jobs. They only want to know that their syllabus documents have been attended to, and that all students who pass the course have achieved an acceptable level of competency in the defined learning outcomes.

Elizabeth King's *Lecturers' Guide to the Certificate of Horticultural Skills* has been circulated to a number of you for comment. This is a teacher's document, and provides much useful material which is not included in the syllabus. Elizabeth is anxious to receive comments and suggestions for changes. She sees it as a document which is expected to grow and develop with input from practising lecturers. Elizabeth's phone number is (09) 227 3406.

Assessment and recording of competencies

This typically causes worry for TAFE lecturers. In the past people have spent many hours devising complex ways of assessing and recording the performance of every learning outcome and every learning criterion, and deciding whether criteria are essential or not, and whether to add extra columns for "attitude", etc. These people usually have not had to teach a TAFE course with 15 to 25 students, or they would know that this approach to assessment would mean there would be no time left for teaching!

Elizabeth's *Guide* emphasises that "assessment should be based on the lecturer's judgement that the learner has attained competency in the knowledge and skills of the learning outcomes". This links in with the earlier comment that lecturers need to feel empowered to make their own judgements.

At the next meeting at Murdoch campus on Friday 24 June, we will look at methods of record keeping, as these will need to be standardised throughout the State. We will emphasise three things

- that official record keeping will apply only to learning outcomes
- that lecturers may wish to keep further records for their own use
- that records are legal documents, and lecturers may be asked to account for their decisions.

Articulation

A topic which kept coming up over and over again during the Bunbury meeting was the problem of whether the new course articulates neatly into the existing certificate of Horticultural Skills. The teachers from Harvey Agricultural School were also interested, because they are anxious that their pupils be given credit in the TAFE certificate when they leave school.

Elizabeth King spoke to the group on this matter. She said that while the link between courses is not final, the Certificate and Advanced Certificate courses will be rewritten in CBT format in the near future, and attention will be given to *course mapping*. This entails drawing up a matrix and entering the competencies at the appropriate level. Thus no competency would be repeated, unless it is at a higher level of difficulty. Here is a simple example.

ASF level	Watering	Soils	Fertilisers
ASF 1: Basic Skills	Maintain sprayers & sprinklers.	Apply mulch and compost to garden beds.	Apply different types of fertiliser.
ASF 2: Certificate	Maintain & operate water-ing system.	Give reasons for soil improvement.	Identify and use different fertilisers.
ASF 3: Advanced Certificate	Design & instal an irrigation system.	Analyse soil problems.	Analyse nutrient deficiencies.

Plans to run the new course

The following centres will probably be running the new Certificate on Horticultural Skills.

Geraldton Regional College	(099) 21 4122
Manjimup Regional Centre	(097) 71 2088
Margaret River TAFE Centre	(097) 57 2310
Midlands Regional College	(09) 274 9368
Murdoch TAFE Campus	(09) 310 9244
South West Regional College	(097) 21 4455
Denmark Agric. College	(098) 48 1100
Harvey Agric. High School	(097) 29 1303

The next project meeting

The next meeting will be held at the Murdoch campus at 9 am on 24 June. Please let Study Area Leader Chris Oliver know on 310 9244 if you can be there. If Chris is busy, you can leave a message with Lillian.

The research

The first questionnaire has gone out to a number of lecturers and the answers have started to come back. It is important that Clare receives a good proportion of replies to help with her research, so we urge you, if you received a questionnaire, to fill it in and return it in the pre-paid envelope to Curtin University. The research at this stage is looking at lecturers' view on the new course.

Your answers will help build on to the next questionnaire which will be looking at lecturers' involvement in the development of the new course.

Certificate of Horticultural Skills

Project Newsletter

No 4: July 1994

The second project meeting

The meeting at Murdoch on 24 June was attended by staff from Murdoch, Bunbury, Rockingham, the TAFE External Studies College and, for the last part of the meeting, a representative from Geraldton. Apologies were received from Albany, Fremantle and Midlands. This was a widely representative group, and most worthwhile in bringing together lecturers from the pilot course and others who are going to be teaching the new course shortly.

Two more sites are now running with the new course next semester or next year, and the "network" has now grown to ten.

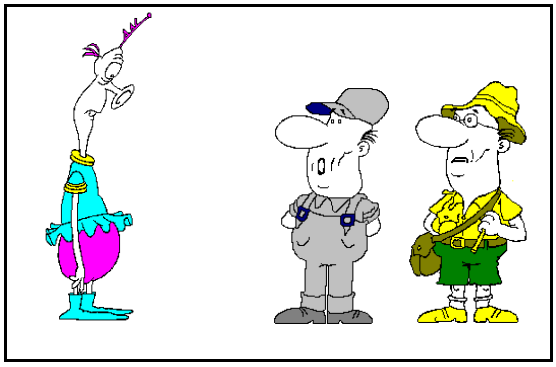
- Geraldton Regional College (099) 21 4122
- Gt Southern Regional College (098) 41 0144
- Manjimup Regional Centre (097) 71 2088
- Margaret River Campus (097) 57 2310
- Midlands Regional College (09) 274 9368
- Murdoch TAFE Campus (09) 310 9244
- Rockingham TAFE campus (09) 592 0222
- South West Regional College (097) 21 4455
- Denmark Agric. College (098) 48 1100
- Harvey Agric. High School (097) 29 1303

Competency based training (CBT)

There appears to be concern in some places about the nature and demands of CBT. The official definition of CBT is "training geared to the attainment and demonstration of skills to meet industry specified standards."

It means "doing" things rather than learning about them. It means a change from marks and norm-referenced assessment to mastery and criterion-referenced assessment. However, you are still allowed to keep marks in your personal records if you find that helpful.

It may mean that some of your teaching and assessment methods will have to change, but not necessarilly. If you feel that you need staff development in what CBT will mean to you and your institution, you should get your staff development officer to ring CBT coordinator, Lyn Petani, on (09) 235 6192, and arrange a series of workshops.



CBT meets the horticulture lecturers

Project materials

Four lecturers have been teaching new subjects in the pilot program at Murdoch campus. They have agreed to put together some preliminary notes about their subjects to pass on to those who will be teaching these subjects in a few weeks' time.

The pilot program staff have been flat out, grabbing materials on the run as usually happens when lecturers begin a new course. However, they have agreed that a short overview of their subjects and some comments on their experiences might be useful to other lecturers. The pilot staff and their subjects are

- Alan Batt, *Horticultural safety* (09) 310 9244
- Eric Crump, *Soils and watering* (09) 310 9244
- Chris Oliver, *Gardening Fieldwork* (018) 09 6005
- Kevin Wass, *Workplace Communication* (09) 336 8295

Some lecturers have expressed an interest in being able to consult with the pilot lecturers in preparation for teaching the new course. This we see as important, and the four lecturers are offering an invitation to lecturers teaching those subjects to telephone them and talk about any problems they may have.

This is the concept of the "network". You just need to pick up the phone.

The project group will try to find some funds to develop fuller teaching packages later in the year. No promises yet, but it is in the pipeline!

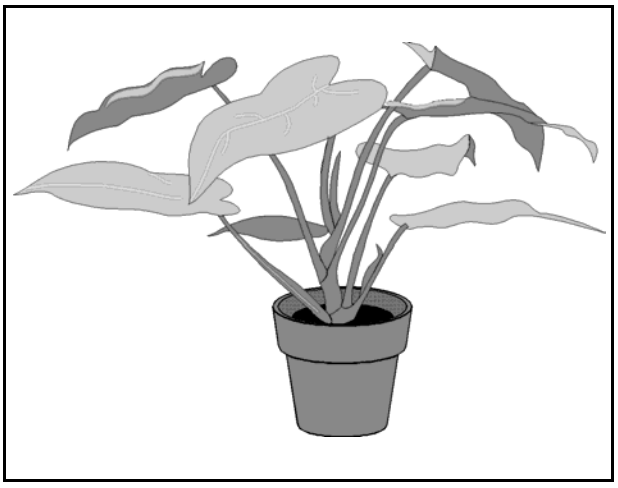
The research

The questionnaires have been coming in slowly, but the return rate is still less than 50%. Clare says she is about to send out the second one, so please make sure you've completed and returned the first.

The responses are very useful for discovering what you think and what you need, especially those of you who are feeling isolated and don't know what is going on.

The syllabus document

A small number of lecturers have complained that they haven't seen the new syllabus yet. You should be able to get the IT officer to print it out on the CMIS network in your library. If you can't manage this for any reason, ring Elizabeth at the TAFE External College, and she'll see if she can find one for you.



Here's an easier one for you to identify!

Monitoring the course for review

One of the IETC requirements for new courses is that they should be monitored and reviewed, and that changes will be made if necessary.

This is very important for us as teachers. It means that we get a chance to criticise and complain about things we don't like, or things we don't agree with. It also gives us the chance to give feedback from students, and from employers when relevant.

However, we have to keep records of our comments and feedback, and know who we can send them to. Study Area Leader, Chris Oliver, has agreed to be the collector of feedback for the new Certificate of Horticultural Skills. Thanks Chris. It will be a nuisance job, but very important. Chris will collate them and see that they in turn are passed on to the Horticulture Co-ordinator at the IETC.

Recognition of prior learning

Some staff will be concerned with RPL when students are being counselled into the new course. This is another feature of the competency based training agenda. There is an existing Non-Standard Exemption form, which can continue to be used, but the meeting felt that a set process needs to be developed so that practice will be consistent in all colleges and campuses.

Mention was made of an RPL Assessors course offered at the Central Metropolitan College of TAFE. Apparently it is the aim of the Department of Training to have an RPL specialist appointed to every campus.

Australian Standards Framework

The new course is pitched at ASF level 2, which means that graduates are "able to perform proceduralised tasks under general supervision, at a level corresponding to competent operative to advanced operative."

There is some debate as to whether this is the correct level for the new course. Some people are looking into this, and we hope to come up with a definite answer in the next Newsletter.

Certificate of Horticultural Skills

Project Newsletter

No 5: August 1994

The pilot course in operation

The new CBT course is now running at Murdoch and Midlands. Another eight lecturers are teaching in the pilot course this semester.

It is hoped that the pilot lecturers will be able to produce some teaching materials or summary teaching notes to pass on to other lecturers who will be starting the new course next year. This will be discussed at the Study Area meeting at Midlands College later this month, and some decisions made on what is a reasonable amount of development to expect within the given time and funding.

Records as legal documents

Somebody questioned the comment in the third Newsletter "that records are legal documents." This is true in the sense that rolls and records can be required in a court of law as evidence for or against an offender.

It is also possible for students to sue if they think their grades are unfair. In this sense, lecturers may be asked to account for their assessment decisions, and it is just as well to have written records of how these decisions were made. These should really be kept for a number of years.

ASF level 2

The new course is designed to produce graduates at Australian Standards level 2. Note the description of this level as

> "The person has an established work orientation, and the knowledge, skills and demonstrated capacity to perform proceduralised tasks under general supervision and more complex tasks involving the use of theoretical knowledge and motor skills under close supervision.
>
> This level corresponds to an advanced operative or service sector worker.
>
> Current preparation for employment at this level is generally obtained through job specific or general training which may be certified by appropriate authorities."

Students will enter the course at level 1, and their training will advance them to level 2. The Trade Certificate will take them to level 3.

Teacher empowerment and CBT

It is not the concern of the IETC *how* you choose to teach, as long as your students can perform the tasks set out for them at that level. Performance, rather than knowing how to perform, is the central ingredient of competency based training.

The important thing about using CBT is that you do not lose sight of what you already know to be sensible and fair in your teaching. CBT does not mean that you throw everything you have ever done before in the bin.

You may keep your records in the way which you find most efficient way. If you are happy judging competency in terms of marks - and many teachers prefer doing this - then do so. The marks do not have to be submitted to anyone, although you may be asked to explain why a student passed or didn't pass.

There may even be times when you want to set a little exam for your subject, even though competency based training does not require them. If, in a specific circumstance, you think an exam is needed, you can negotiate that with your students.

The package

A package of materials was posted to lecturers at colleges and centres where the new course will be running this semester or next year. This consisted of lecturers' comments on the four subjects which had run in the pilot program at Murdoch in the first semester. It is hoped that these should be of some help to lecturers teaching in those subjects.

It may be of some use also for lecturers teaching in other subjects to read about others' experiences with the CBT course.

The package also included the *draft record sheets* which were discussed at the last project meeting. The point of these drafts is to indicate that lecturers are free to keep class record sheets in the way it best suits them, but that the most important is the class record of learning outcomes. These will be developed further at the next Study Area meeting. It has been suggested that eventually they could be printed and distributed as a Mark Book.

The Research

Two questionnaires have been distributed to 32 lecturers who might be involved in teaching the new course this year or next. (Of course, it is not possible to know in advance exactly who will be timetabled to teach the new course.)

The answers to the second questionnaire are coming in slowly, and Clare asks that if you have received a questionnaire and have not yet returned it, that you do so as soon as you can.

Clare's involvement with the project will soon be coming to an end, and she would like to tie up all the loose ends before her departure.

Study Area meeting at Midlands

The Study Area meeting will be held at Midlands Regional College on 19 August. The Certificate of Horticultural Skills project will be on the agenda again.

The meeting will discuss the possibility of appointing someone to produce materials in each subject area. Presumably, one of the lecturers who has been involved in teaching the pilot subjects at Murdoch and Midlands will be the obvious choice to develop teaching materials. The nominated lecturer can develop notes, exercises and tests as the subject is piloted.

These lecturers can then be available to talk to and advise other lecturers starting the new subjects next year.

Some ideas of what will be needed are coming in on the last questionnaire (another good reason for completing and returning your questionnaire). We will look at these suggestions and decide how much can be done within the time and funding available. Funding is always the problem, but there will probably be a little bit for each subject.

Certificate of Horticultural Skills

Project Newsletter

No 6: September 1994

The pilot course

The new Certificate of Horticultural Skills is being offered this semester at Murdoch campus, Midlands Regional College and Karratha College.

Nine of the new subjects are now officially part of the pilot program for this year.

The trial at Karratha

There was pressure to get the new course started at Karratha College as soon as possible, and Ruth Robertson currently finds herself as teacher or "mentor" of students taking Horticultural Safety, Soils and Watering, Describing and Using Plants, Tools and Machinery, Gardening, Lawn and Turf, and Nursery.

People in the community, including Skillshare, the school and hotel gardeners and a turf contractor, have been recruited to provide the students with their required practical work. The students record their progress in their diaries, which Ruth then checks and signs as they achieve the necessary learning outcomes. You sound like a brave woman, Ruth! Good luck!

There may be a couple of lecturers running the new course single-handed next year, and it might be a good idea to have a talk to Ruth.

Congratulations

Congratulation to Christine Cooper who has been appointed as acting Associate Director at South Metropolitan College of TAFE, and to Peter Graham who has taken her place as Senior Lecturer at Murdoch campus.

Developing teaching materials

Attention was given at the Study Area meeting at Midlands to setting up a plan for the development of teaching packages for the new course subjects.

Most of the subjects in the new course will have been piloted by the end of the year, and part of the reason for a pilot scheme is that the pilot lecturers will have something to pass on to other teachers.

A small sum of money has been found to offer some incentive to selected lecturers to develop their pilot notes into materials to share with those beginning the new course next year.

This is good news. A number of lecturers who answered the questionnaires expressed a desire

for some kind of materials development. Obviously it can't be too grand at this stage, nor would it be desirable to produce too many complex or expensive audio-visual or printed materials while the course is still under review.

The developers have been asked to produce a basic teaching package to include

- a timetable (no of hours, no of weeks)
- teaching notes
- projects, activities
- worksheets, exercises, games
- overhead transparencies
- assessment strategies
- a list of available resources

The developers have been advised to talk with each other and with other lecturers of their subjects. Development can't be done in isolation. I am sure they would welcome discussion and ideas from those of you who know you are going to teach these subjects next year.

Responsibility for developing the first eight subjects are as follows

Horticultural Safety	Alan Batt
Soils and Watering	Eric Crump
Describing and Using Plants	Ian Reynolds
Fieldwork - Gardening	Chris Oliver
Machinery and Tools	Ric Ullman
Writing Skills for Work	Jocelyn Shirley
Fieldwork - Lawn and Turf	Doug Monk
Fieldwork - Nursery	Christine Cooper

Two electives, Fieldwork - Production Horticulture and Fieldwork - Landscaping will be developed next year.

The teaching packages will be under review as they are implemented next year. It will be important that lecturers give feedback to the developers, so that the materials will continue to be improved and updated.

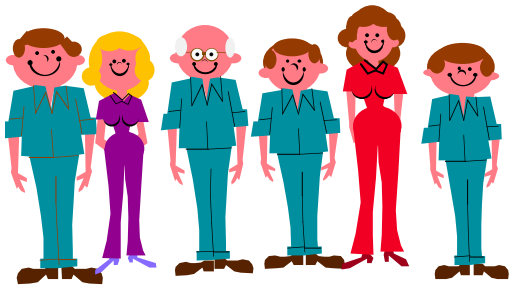
Last Newsletter

This will be the last edition of the Newsletter. We have received some positive feedback, and we hope you all have found this method of dissemination useful.

The six Newsletters have been distributed to all full time lecturers in the Study Area, to Assistant and Associate Directors, to Curriculum Services staff and to the Director, Skills Formation.

We have used them as a method of passing on information from the development meetings, from the Study Area meetings and from Curriculum Services. We have also taken up points raised in conversation with lecturers and from the questionnaires, and discussed or expanded on them.

In a real sense, the Newsletters have been a vehicle of two way communication on the issues arising from the new Certificate course. On another level, they should have been useful for spreading information and raising awareness about the new course.



Lecturers' Guide

The *Lecturers' Guide to the Certificate of Horticultural Skills* was distributed to Senior Lecturers in selected centres. Some of you stated in the last questionnaire that you had not seen it. If you still want a copy, ask your senior lecturer or write to Elizabeth King at the TAFE External Studies college.

The network

One of the aims of the curriculum dissemination project was to encourage the concept of communication and networking among those people involved in the new course. Unfortunately it has not involved much face to face contact outside the metropolitan area, which is a great pity. However, we strongly encourage you to continue to build on the network, to get on the telephone and to discuss issues as needed.

Appendix E4: Questionnaire 1 and covering letter

GPO Box U 1987
Perth WA 6601
Telephone: (619) 351 2182
International FAX (619) 351 2547
Email McBeath_C@curtin.edu.au

3 June, 1994

Dear lecturer

This questionnaire is part of a research project on the new Certificate of Horticultural Skills, which is about to be introduced in your Study Area. Curriculum change can be a difficult process, often causing stress and frustration among lecturers. It can create cynicism, anger and distrust and, sometimes, may even affect students.

One of the findings from curriculum research is that teachers tend to cope better with the change process when they are able to examine their own problems and fears and talk about them freely. Individual reflection and discussion on the change process, and group problem solving, are claimed to be among the factors for success.

Part of the model chosen for this curriculum change includes involving lecturers in reflection and dialogue of what the change means to them and their students. The attached questionnaire is the first part of that process, and we hope to learn more about the best way to go from your answers.

There will be a series of questionnaires and meetings during the period that this new course is being prepared for implementation. This is part of the model we have chosen, and we believe that the few hours involved in reflecting and responding will make it easier for you in the long run.

All information collected from the questionnaires will be confidential.

Please return your completed initial questionnaire to me in the prepaid envelope as soon as possible. If you have any problems or you want to discuss the implications of this research further, please ring me on 450 2806. I will be happy to talk to you about the project.

Clare McBeath
Senior Lecturer in Curriculum Studies
Faculty of Education

Lecturers' views on the curriculum change

1. Have you read the new curriculum documents? [Yes] [No]
2. Are you likely to begin teaching the new course this year? [Yes] [No] [Don't know]
3. Are you likely to begin teaching the new course next year? [Yes] [No] [Don't know]
4. Have you been involved in a pilot program? [Yes] [No]
5. Why do you believe this new course is being introduced? .....

   .....

   .....
6. What do you understand are the major changes being introduced?

   .....

   .....

   .....
7. Do you agree with the need for these changes? .....

   .....

   .....
8. Do you agree with the amount of change, as you understand it? .....

.....

   .....
9. How well do you think you will cope with the change? .....

   .....

   .....

   .....
10. How do you think your fellow lecturers will cope with it? .....

    .....

    .....

    .....
11. In what ways do you think you might be rewarded for participating in developing and teaching this new curriculum? .....

    .....

    .....

12. Do you fear your students will suffer from the period of transition into the new course?

    .....

    .....

13. Do you feel uneasy about the amount of work the change may create for you personally?

    .....

    .....

    .....

14. Do you believe there is enough time in which to prepare for teaching the new course?

    .....

    .....

15. Do you believe there is enough support available to help your Study Area handle the change effectively? .....

    .....

    .....

16. Are you involved in developing teaching resources and materials for your subject?

    .....

    .....

17. What do you think you are going to need most to help you understand, accept and implement the new curriculum effectively? .....

    .....

    .....

    .....

Name .....

College .....

.....

.....Direct phone number .....

Thank you very much for completing this questionnaire.

Appendix E5: Questionnaire 2 and covering letter

GPO Box U 1987
Perth WA 6601
Telephone: (619) 351 2182
International FAX (619) 351 2547
Email rmcbeath@cc.curtin.edu.au

3 July, 1994

Dear lecturer

This is the second questionnaire on the new Certificate of Horticultural Skills. I am posting this one to reach you before the holidays begin in the hope that you will return it in the reply paid envelope as soon as possible. However, if it reaches you later, I would rather have it at the beginning of next semester than not at all.

I am very grateful to those who returned the first questionnaire. We have been able to pick up some of the problem areas you mentioned and discuss them at our meetings. Some of the issues you raised have been mentioned in the Newsletters.

This questionnaire deals with how useful the assistance we have been able to give has been to you, your readiness for change, and your ideas for future directions.

All information collected from the questionnaires will be confidential.

If you have any problems or you want to discuss the implications of this research further, please ring me on 450 2806. I will be happy to talk to you about the project.

Clare McBeath
Senior Lecturer in Curriculum Studies
Faculty of Education

Lecturers' participation in new curriculum

1.	Do you know yet whether you will be teaching the new horticulture course in the second semester?	[Yes]	[No]
2.	Do you know yet whether you will be teaching the new horticulture course next year?	[Yes]	[No]
3.	What subjects will you be teaching?	.....	
		.....	
		.....	
		.....	
		.....	
4.	Have you read the syllabus for your teaching subject/s?	[Yes]	[No]
	Do you know where to find a copy?	[Yes]	[No]
5.	Have you received four Newsletters?	[Yes]	[No]
	Were they helpful?	[Yes]	[No]
	Do you want any back copies?	No 1	.....
		No 2	.....
		No 3	.....
		No 4	.....
6.	Have you seen the *Lecturers' Guide to the Certificate of Horticultural Skills?*	[Yes]	[No]
Was it helpful?		[Yes]	[No]
7.	Have you received the subject Reviews from the pilot lecturers?	[Yes]	[No]
Were they helpful?		[Yes]	[No]
8.	Which of your teaching subjects are included among	.....	
	the reviews?	.....	
		.....	
		.....	
		.....	
9.	Have you received the proposed class record keeping package?	[Yes]	[No]
	Was it helpful?	[Yes]	[No]

10. Do you know the name of another lecturer who will be teaching your subject/s? [Yes] [No]

11. Do you know the telephone number of another lecturer who will be teaching your subject? [Yes] [No]

12. Have you telephoned or talked to someone who will be teaching your subject/s to discuss your teaching plans? [Yes] [No]

13. Have you had enough help to start planning your subject/s? [Yes] [No]

14. Have you started planning your 17 week subject/s? [Yes] [No]

15. Have you finished planning your 17 week subject/s [Yes] [No]

16. If the project team is able to get further funding to prepare teaching materials of some kind for the new course, what sort of materials, or what sort of assistance, would you find most useful?

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Name .....

Date .....

Thank you very much for completing this questionnaire.

Appendix E6: Analysis of questionnaire 1

(Questionnaires were distributed in early June after two Newsletters had been mailed. Some might have read three Newsletters before they returned their answers.)

Question no 1

Respondent	Have you read the new curriculum documents	Comment
1.	Yes, a couple	Senior lecturer
2.	No	
3.	Yes	Senior lecturer
4.	Yes	Senior lecturer
5.	Yes	Senior lecturer
6.	No	
7.	Yes	Senior lecturer
8.	Yes	Pilot lecturer
9.	No. Where do they live?	
10.	Yes	
11.	Yes, as they affect me.	Pilot lecturer
12.	Yes	Pilot lecturer
13.		
14.	Yes	

Comment on question 1 responses:

Yes	10
No	3
No answer	1

Eight of the positive responses were from senior lecturers or lecturers teaching in the pilot course, who might have been expected to have read the syllabus. Respondent number 9's question was answered in the next Newsletter.

Question no. 2

Respondent	Are you likely to begin teaching the new course this year?	Comment (by August more was known)
1.	No	Correct
2.	Don't know	Didn't
3.	Don't know	Didn't
4.	Yes	Incorrect answer
5.	Yes	Correct
6.	Yes	Incorrect answer
7.	Yes	Correct
8.	Yes	Correct
9.	Don't know.	Didn't
10.	No	Correct
11.		Pilot lecturer
12.	Yes	Correct
13.	No	Correct
14.	Yes	Incorrect answer

Comment on question 2 responses:

Yes	7
No	3
Don't know	3
No answer	1

Only seven of these answers were correct in the long term, indicating a certain amount of uncertainty or confusion about future plans.

Question no. 3

Respondent	Are you likely to begin teaching the new course next year?	Comment
1.	Yes	Senior lecturer
2.	Don't know	
3.	Yes	Senior lecturer
4.	Yes	Senior lecturer
5.		
6.	Don't know	
7.		Senior lecturer
8.	Don't know	
9.	Don't know	
10.	Don't know	
11.		
12.	Yes	
13.	Don't know	
14.		

Comment on question 3 responses:

Yes	4
Don't know	6
No answer	4

Not very useful answers. Plans not in place. Decision makers were still unsure. At least one answered on behalf of the college and not herself.

Question no. 4

Respondent	Have you been involved in a pilot program?	Comment
1.	No	
2.	No	
3.	No	
4.	No	
5.	No	later involvement
6.	Yes	Incorrect answer
7.	Yes	
8.	Yes	
9.	No	
10.	No	
11.	Yes	
12.	Yes	Incorrect at time
13.	No	
14.	No	

Comment on question 4 responses:

One incorrect answer probably answered on answered on behalf of the college. Another was anticipating later involvement in the pilot. Knowledge of two more colleges joining the pilot in the second semester was not known at this stage.

The main usefulness of this question was that all respondents knew that there was a pilot program underway. This was reiterated in the Newsletters.

Question no. 5

Respondent	Why do you believe this new course is being introduced?	Comment
1.	Because we have been told to by the IETC	
2.	In response to industry survey.	
3.	Because CBT training is flavour of the month following the Carmichael report.	
4.	To enable TAFE to more adequately meet the needs of employers regarding training of employees in the Horticulture industry.	
5.	IETC direction; CBT; ASF levels; ANTA guidelines.	
6.	To comply with commonwealth directives.	
7.	To fill niche at level 1/2 on the new ASF, thus providing an introductory/ awareness creditation at this level.	
8.	To get more in line with industry	
9.	To suit school leavers. Is it taking the place of the Certificate?	
10.	To allow students to develop more practical skills during their study period (as opposed to theory).	
11.	To train a student to a level where they can successfully obtain employment in the field of horticulture, or go on to further study.	
12.	To provide a very practical course for people with little/no training, or long out of work. Also it will be a pilot for introduction of CBT.	
13.	To cater for those who would probably fail the Certificate. To provided productive activity for unemployed youth and others.	
14.	Better oriented to market needs.	

Comment on question 5 responses:

Some interesting comments, all with some degree of understanding of the reason for the new course and a knowledge of national changes, and some somewhat cynical. A number of these comments were followed up and expanded in subsequent Newsletters.

Question no. 6

Respondent	***What do you understand are the major changes being introduced?***	***Comment***
1.	(I) Way of assessment; maybe way taught. (ii) Way courses articulate.	
2.	At this college we have had very little information, apart from two Newsletters. It is difficult for us to attend the project meetings, so any responses here are meaningless. Coping with constant revision and change is easier than putting up with inadequate support in a top heavy bureaucracy.	
3.	Lower level and CBT training. The Award structure for wages does not fit this industry where many people do not work under an award.	
4.	The new curricula are competency based, ie, training is more practical and learning takes place by doing and demonstrating.	
5.	The introduction of an ASF level 1 and 2 course, training at the operative level.	
6.	Change to CBT format and assessment.	
7.	CBT format. More practical, hands on teaching and assessment.	
8.	More hands-on skills	
9.	Seems to be becoming more practical & basic, and less theoretical. Probably will suit school leavers with zilch horticultural knowledge better than present Cert & Adv cert. Also becoming standard over every college.	

10.	The current course is being re-modelled to a more practical one, the electives will be channelled to a particular field (ie nursery, gardening etc), the assessment method will change.	
11.	The assessment of students - a skills based curriculum that should produce capable students.	
12.	The amount of practical work. The removal of exams - the introduction of CBT, with assessment by P or H, instead of measured assessment.	
13.	CBT	
14.	Less formal exams, more practical tuition	

Comment on question 6 responses:
These answers indicate a good grasp of the essential changes and an indication that respondents were interested in the conceptual changes involved in the new course.

Question no. 7

Respondent	Do you agree with the need for these changes? .	Comment
1.	6 (i) no. 6 (ii) Yes	looking forward to long term problems
2.		
3.	Yes, but there is no finance to make it a real change.	Always worrying about the admin problems
4.	Yes	
5.	Yes	
6.	Not really	
7.	Yes, due to the need to provide a course at this level. Fulfils a better condition for employee or the "semi-skilled' labourer work level.	
8.	Yes	
9.	Yes	
10.	In most ways, yes	
11.	Yes	
12.	Yes. Not only will it remove the pressure of exams, but also the standard of achievement will be much higher.	
13.	Yes	
14.	Yes	

Comment on question 7 responses:

Yes	10
mixed response	3
No answer	1

These answers reflect the responses from the survey where lecturers indicated support for the new ideas in general. There is a high degree of thoughtful acceptance, even though a number of the respondents hadn't read the syllabus documents nor knew whether they were to teach it or not.

Question no. 8

Respondent	Do you agree with the amount of change, as you understand it? .	Comment
1.	Don't know.	
2.		

3.	No, not with current resources.	Admin worries
4.	Yes	
5.	The amount of change at this level of course is understandable. It's the total amount of change in the system that frustrates lecturers.	Admin worries
6.	No.	
7.	Yes. Although would like to see further modification now.	Pilot lecturer
8.	Yes	Pilot lecturer
9.	Look, I really don't know any more about it than what I've learnt from the 2 newsletters.	
10.	I'm not sure I like the new Pass & Hold assessment as it doesn't give the high achieving students any incentive or recognition.	
11.	Yes, but the limitations are as yet unknown.	pilot lecturer
12.	Yes	
13.	Yes	
14.	The amount of change appears open ended, at this stage.	

Comment on question 8 responses:
Mixed feelings, perhaps apprehension and lack of knowledge of what it will mean. These responses are not unlike the answers to the survey questionnaires, mostly positive, but some degree of ignorance.

Question no. 9

Respondent	How well do you think you will cope with the change? .	Comment
1.	OK	
2.		
3.	I will modify the changes to survive in the face to face situation.	Confident
4.	Well	
5.	Better now that a project to steer the implementation has been funded and for the first time it appears as if we may be doing it right!	Reference to the project activity
6.	If the changes are effected with adequate changes to TAFE policy, I'll cope. If not, few will.	Hard to get a handle on this fellow
7.	OK. Managing so far, apart from the need for more intensive record keeping!	Pilot lecturer
8.	OK	Pilot lecturer
9.	Just fine thanks! Especially if there are a few chances for discussion with the coordinators & those who've run pilot courses.	Discussion needed
10.	Very well, as long as we are kept informed, preferably by someone coming down here & talking with us about it rather than just by paper work, and we get as much notice as possible as to when the "change" will occur.	Information needed. Preferably face to face
11.	Very well.	Pilot, confident
12.	It will be easier in the subjects that already have a large practical component, but more difficult in what have been more theoretical subjects. It will be simpler once the tasks are all worked out and practised.	Looking ahead
13.	OK - we are "young thrusters" out here!	Confident
14.	OK	

Comment on question 9 responses:
Remarkably positive attitude. Two rural people confirm need for discussion and face to face contact.

Question no. 10

Respondent	How do you think your fellow lecturers will cope with it? .	Comment
1.	OK once they get over the fear of a new system.	
2.		
3.	Difficulty at first. I don't think competency based assessment as proposed with Pass/Holds offers students anything.	
4.	Well - we are lucky enough to have an adaptable highly educated and enthusiastic group of lecturers.	Confident
5.	If they are provided with direct mail newsletters and information, they will take some ownership of the course rather than being forced to change.	Newsletters as a positive strategy
6.	Depends on individuals and how well we are supported by the administration.	Support as a strategy
7.	OK. Providing they have a full appreciation of the level they are aiming at.	ASF levels as a strategy
8.	Some OK, some difficult	
9.	Same - we're all pretty adaptable.	Confident
10.	Same answer.	Face to face contact as a strategy
11.	All will cope easily, despite some changes to their habits.	Confident
12.	If they are sure of their subjects they will have little trouble. As they are all very practical and confident of what they know and believe in, I think they will cope well once the syllabi are provided.	
13.	OK. As above	
14.	OK	

Comment on question 10 responses:
Again, very positive. Two respondents reiterated points they had made to me in conversation, reinforcing their growing sense of ownership.

Question no. 11

Respondent	In what ways do you think you might be rewarded for participating in developing and teaching this new curriculum?	Comment
1.	Haven't thought about that, as I don't look to that.	
2.		
3.	Is this a joke?	Interesting
4.	By providing a more responsive industry driven training program and being involved in the implementation of this.	
5.	Given time and the resources by the system that wants the change so that a first rate delivery system and course content can be delivered to the student group.	
6.	Hopefully, in either time or money.	
7.	Greater enjoyment of teaching due to the emphasis on practical skills.	
8.	None, other than personal satisfaction.	
9.	No idea. Chocolate?. Satisfaction in a job well done I guess.	
10.	I'm not sure if there will be a "reward", perhaps by continuing to be employed by TAFE.	
11.	Experience in CBT. Closer contact with peers. A greater workload.	
12.	I will have an earlier and deeper understanding of its fundamentals. I will have greater satisfaction in the standard of work provided for the industry as the 75% competency will weed out any students who may previously have passed, or are lazy, or incapable of doing things well.	

13.	Encouraging people into the workforce	
14.	Not looking for rewards. But less stress on students (ie, exam stress)	

Comment on question 11 responses:
The question was thrown in as something lecturers could perhaps think more about. It is mentioned in the research literature as being an important incentive. The interpretation of responses ranged between personal reward and reward from seeing the students succeed. Some responses were cynical.

Question no. 12

Respondent	Do you fear your students will suffer from the period of transition into the new course?	Comment
1.	Only the getting used to a new system.	
2.		
3.	Yes	Senior, with admin worries.
4.	No. Response from students to date has been very positive.	
5.	No - they will again be well protected from the bureaucracy by the staff at this college.	
6.	Yes.	Has nothing to do with the course to my knowledge
7.	Not really. They seem to enjoy it more.	
8.	No	
9.	Only part timers will find themselves working though the old syllabus.	
10.	No, as long as they are kept informed of how the changes will affect them.	
11.	No. What has changed enough to cause any suffering?	
12.	I hope not. Some will be disappointed at not being able to be rewarded by achieving high grades.	
13.	What period of transition? How is the transition different from what happens now?	
14.	No	

Comment on question 12 responses:

Yes	2
No	9
non-committal	3

Most of the answers indicated a determination that students should not be affected by lecturers' problems. One suggested that part-timers may not implement the new course successfully. Positive, overall.

Question no. 13

Respondent	Do you feel uneasy about the amount of work the change may create for you personally?	Comment
1.	There is never enough time but I do believe we have enough time.	
2.		
3.	No - I'll bet you I don't get five minutes to allow this change to occur as it should.	

4.	Yes. This is always a difficult area to deal with - How much time is enough?	
5.	No! Consider the development of curriculum and materials in the secondary sector.	The grass on the other side of the fence ....
6.	No.	
7.	Depends on when you would be given units to teach; prior to commencing.	Pilot
8.	No	Pilot
9.	N/A. No idea if or when it'll be running down in Albany. Haven't heard anything about it here.	
10.	Yes, as long as I am told when the new course will be implemented at Manjimup & have any new course materials made available as soon as possible.	
11.	There is never enough time, but yes I did cope, possibly at the expense of my family time.	Pilot
12.	Initially it is proving hard because of the periodic arrival of the country block apprentices (10 extra hours per week for me) along with the development of the course ready to teach on July 25th. However, there is always some sort of pressure.	
13.	No	
14.	No	

Comment on question 13 responses:
"There is always some sort of pressure" perhaps sums up the majority attitude. Four *No* answers. Some confused *Yes* and *No* answers, followed by a clarifying comment. Good personalised responses.

Question no. 14

Respondent	**Do you believe there is enough time in which to prepare for teaching the new course?**	**Comment**
1.	If we create a lot of extra work, I think we have missed the aim of this process.	Realist
2.		
3.	Yes	
4.	No. Part-time and casual lecturers such as myself have always carried out more work than is usual and I feel the CBT programs will reduce the amount of notes and preparation for examinations.	
5.	Has there been any difference to that in TAFE in the last 15 years? Maybe the workload should be spread between all lecturers (not the volunteers).	Development workload?
6.	Yes.	
7.	No, as long as the resources are on hand.	Pertinent
8.	No	
9.	No not really. Hopefully the syllabus documents will be a little more clearly written than some of the old ones, and hopefully a little more relevant than some old ones.	Hasn't seen the syllabus documents yet.
10.	No.	
11.	No. I feel I have, and can, cope.	Pilot
12.	No. There hasn't been enough time to collect materials for classes, nor yet to complete the tasks.	
13.	No	
14.	There is never enough time.	

Comment on question 14 responses:
Again some confused *Yes* and *No* answers, followed by a clarifying comment. Overall, the answers to these two questions imply that lecturers will cope with what seems like a normal situation. A touch of martyrdom, perhaps.

Question no. 15

Respondent	Do you believe there is enough support available to help your Study Area handle the change effectively?	Comment
1.	If they come up with the promised support, yes, but from past experience I don't think so. I hope I am wrong.	Senior lecturer, separating himself from "them"
2.		
3.	No - CBT was imposed from above using the Metal Trades as a model (hardly the way to develop good curricula.)	Senior lecturer, with admin worries
4.	The support for regional centres needs to be addressed - we are often the last to find out anything as we are not in the mainstream.	Rural
5.	No! External advice is always helpful to stop inbreeding and to see how other Study Areas and institutions have proceeded.	Senior lecturer, battling the system; lateral thinker
6.	Definitely not.	
7.	Support staff assistance may have to be boosted. Special CBT workshops (Hort.) prior to teaching.	Pilot lecturer
8.	No	
9.	No idea. Sorry	
10.	I don't know what support is available.	
11.	Yes, but some early help could have been better (NOT this course)	
12.	I think the difficulty that may arise will be when lecturers not yet involved have to face teaching and assessing it. We will be the "help". I think there will need to be study group meetings and discussions before then.	Pilot lecturer
13.	Don't know	
14.	Don't know.	

Comment on question 15 responses:
The majority don't think they will get enough help. Three suggestions for what could be done to improve things, including two pilot lecturers. Four *Don't know*, three of whom are rural. There don't seem to be any patterns in the answers.

Question no. 16

Respondent	Are you involved in developing teaching resources and materials for your subject?	Comment
1.	I should not have to - unless I have to get the material because the Study Area has not done it. I suspect I will have to.	This person volunteered at the Bunbury meeting.
2.		
3.	No	
4.	Yes.	
5.	Not officially, but if the past proves itself again individual staff will again go their own way.	This person volunteered
6.	Yes.	

7.	Yes. Experimenting with different delivery and assessment methods.	Pilot, developer
8.	Yes	Pilot, developer
9.	No	
10.	At present yes, but with new course I don't think so.	
11.	Only as normal, yes.	Pilot, developer
12.	I haven't had time to collect resources yet, but I assume it will be my responsibility here. All suggestions will be welcome.	About to pilot, developer
13.	Not in Ort Skills Certificate	
14.	No	

Comment on question 16 responses:
Some cynicism, some positive answers. Answers personalised.

Question no. 17

Respondent	What do you think you are going to need most to help you understand, accept and implement the new curriculum effectively?	Comment
1.	Acceptance of the change.	
2.		
3.	Greater resources.	
4.	Consultation and feedback. Feel good about accepting and understanding the new course, but sometimes feel a bit isolated out here in the bush.	
5.	Useable student worksheets and assessments for adoption; Teaching guides for achievements of similar standards; Not more curriculum documents like TE78s; Not pigeon-holed assessments.	
6.	Class size reductions; Massive support staff involvement; Revision of syllabus content to align it with the limitations of CBT; Funding for equipment.	
7.	Pre-delivery workshops on teaching and assessment methods. Planning time for teaching schedules.	
8.	Time	
9.	Discussion with staff from other colleges. Any chance?	
10.	Information about it, and especially subject notes.	
11.	Nothing specially. 1) plenty of warning on any new subject. 2) continued support by SL	
12.	More liaison, discussion suggestions, constructive criticism from other staff in the same area. Help in fining resource materials. Note: Elizabeth is very helpful.	
13.	Assessment guidelines which have a reasonable chance of success.	
14.	Materials	

Comment on question 17 responses:
These answers were very useful.

Appendix E7: Analysis of questionnaire 2

(Questionnaire distributed in the last week of the semester. They were answered between July 8 and August 16. All but one questionnaire was completed before or during the holidays.)

Question no. 1

Respondent	Do you know yet whether you will be teaching the new horticulture course in the second semester?	Comments (Actual situation one month later)
1.	Yes	No
2.	Yes	No
3.	Yes	Yes
4.	Yes	No
5.	No	No
6.	No	No
7.	Yes	Yes
8.	Yes	No
9.	Yes	Yes
10.	Yes, will not be teaching.	No
11.	Yes	No
12.	Yes	No
13.	No	No
14.	No	No
15.	No	No

Comment on question 1 responses:
Not a good question. Some respondents answered *Yes* to mean that they knew that they would *not* be teaching the course. Some answered *Yes* in relation to subjects in other courses, not the new Certificate. And some answered *Yes* when they did not know whether they would be running the new course or not.
My reason for using this question was to try to find out where the new course would be taught. By the time of the Midlands meeting (August) I knew this anyhow.

Question no. 2

Respondent	Do you know yet whether you will be teaching the new horticulture course next year?	Comments (Situation as understood by late August)
1.	Yes	No
2.	No	Yes
3.	Yes	Yes
4.	No	Possibly
5.	No	Yes
6.	No	Yes
7.	No	Yes
8.	No	Possibly
9.	No	Yes
10.	Yes. Will not be teaching. Away on LSL.	No
11.	No	Possibly
12.	No	Possibly
13.	No	Possibly
14.	Yes	Possibly
15.	Yes	Possibly

Comment on question 2 responses:
Few actually know whether they will be teaching it or not, even though they may know it will be running in their college. The information about where the course is going to be taught next year is beginning to come in from other sources.

Question no. 3

Respondent	What subjects will you be teaching?	Comments
1.	Soils & Watering; Machinery & Tools; Fieldwork - Production Horticulture	Correct subjects
2.		
3.	Horticultural Safety; Fieldwork -Lawns & Turf; Soils and Watering	Correct subjects
4.	Describing & using plants; Nursery (probably)	Correct subjects
5.	*None in Cert Horticultural Skills*	
6.		
7.	*Describing & naming plants*	
8.	*Plant function & nutrition, Field soils*	
9.	Writing Skills	Correct subjects
10.	*None*	
11.		
12.	*None*	
13.	*Fruit production, Pesticides, Horticultural Soils*	
14.	*Not sure at this time - 1995 timetabling not yet underway*	
15.	*Don't know yet*	

Comment on question 3 responses:
This was meant to double check on the accuracy and understanding of the first two questions. Only four listed subjects from the Certificate course, others apparently interpreting the question to refer to all their teaching areas. The information is not useful.

Question no. 4

Respondent	Have you read the syllabus for your teaching subject/s? Do you know where to find a copy?	Comments
1.	No; Yes	
2.	No; Yes	
3.	Yes; Yes	
4.	No; Yes	
5.		Has taught in the pilot program.
6.	Yes; Yes	
7.	Yes; Yes	
8.	Yes; Yes	
9.	Yes; Yes	
10.	NA; Yes	
11.	Yes; Yes	
12.		
13.	Yes; Yes	
14.	Yes; Yes	
15.	Yes; Yes	

Comment on question 4 responses:
Someone in her response to the first questionnaire had asked where a copy of the syllabus might be found. This was answered in Newsletter 4, and respondents all answered that they knew

where they could find a copy of the syllabus. Three claimed not to have read it. Two didn't answer.
The reason for this question was to double check that respondents were aware of how to get hold of a syllabus, in case I needed to mention it again in the next Newsletter.

Question no. 5

Respondent	Have you received four Newsletters? Were they helpful? Do you want any back copies?	Comments
1.	Yes; Yes	
2.	Yes; Yes	
3.	Yes; Yes	
4.	Yes; Yes	
5.	Yes; Kept one in the big picture	
6.	Yes; Yes	
7.	Yes; Yes	
8.	No (only 3 & 4); Yes, Want 1 & 2	Sent
9.	Yes; Yes Can't find one. Green May?	Sent
10.	Yes; Yes	
11.	X; Yes	
12.	Yes; Yes	
13.	No; Yes; Missing no 2	Sent
14.	Yes; Yes	
15.	Yes; Yes	

Comment on question 5 responses:
This information gave me the opportunity to send back copies of the Newsletter to those who thought they hadn't received them. This served the function of "support giving", one of the objectives of the dissemination model.

Question no. 6

Respondent	Have you seen the *Lecturers' Guide to the Certificate of Horticultural Skills?* Was it helpful?	Comments
1.	No	
2.	Yes; Yes, but a bit old hat for me, but good for new lecturers.	
3.	No, I don't think so.	He was on original list; Sent again
4.	Yes; Haven't put it all together yet!	
5.	Yes; Yes	
6.	Yes; Yes	
7.	No; No	
8.	No	
9.	Yes; Yes	
10.	Yes; Yes	
11.	No	
12.	Yes; Nor needed as not teaching Horticultural Skills	
13.	No	
14.	Yes; Yes	
15.	No	

Comment on question 6 responses:
This had been sent to 20 key people in a variety of colleges. Three people claimed to have seen it although it had not been mailed to them, and may have been copied and distributed by the selected recipients.

I make a note to mention it again in the final Newsletter, suggesting that interested persons ask their senior lecturers for a copy.

Question no. 7

Respondent	Have you received the subject Reviews from the pilot lecturers? Were they helpful?	Comments
1.	No	
2.	Yes; Do know	
3.	Yes; Yes	
4.	Yes; Yes	
5.	Yes	
6.	Yes; Yes	
7.	Yes	
8.	Yes; Yes	
9.	No	
10.	Yes; Yes	
11.	Yes	
12.	No	
13.	Yes; Yes	
14.	No	
15.	Yes; Yes	

Comment on question 7 responses:
These had been sent to everybody who might possibly be teaching in the new course in the second semester (32). Four people did not recall receiving them. Further copies were not distributed, as nobody needs them at the moment.

Question no. 8

Respondent	Which of your teaching subjects are included among the reviews?	Comments
1.		
2.	Pointless question. Country colleges have to teach over a greater number of subjects due to lower enrolments.	
3.	Horticultural Safety; Soils & Watering	
4.	None	
5.	Own (Soils and Watering)	
6.	Own (Horticultural Safety)	
7.	None	
8.	Field soils (Soils and Watering?)	
9.	None	
10.	Own (Gardening)	
11.	None	
12.		
13.	None	
14.		
15.	?	

Comment on question 8 responses:
The answers indicate that only one person actually received any benefit from the reviews. The others didn't need them this year.

Question no. 9

Respondent	Have you received the proposed class record keeping package? Was it helpful?	Comments (compare with answers to question 7 above)
1.	Yes; Yes	No
2.	Yes; Yes, but even the Horticultural model of assessment will be hard to implement.	Yes; Do know
3.	Yes; Yes	Yes; Yes
4.	Yes; Yes, very!	Yes; Yes
5.	Yes; Yes, to a degree- could be in form of Marks Book, when all subjects are CBT	Yes
6.	Yes; Yes	Yes; Yes
7.	No ?	Yes
8.	Yes; Partly	Yes; Yes
9.	Yes; Yes	No
10.	Yes; Yes	Yes; Yes
11.	Yes; Yes	Yes
12.	Yes	No
13.	No	Yes; Yes
14.	Yes; Yes	No
15.	Yes; Yes	Yes; Yes

Comment on question 9 responses:
The reviews and the assessment package were distributed together to all 32 people who might possibly be teaching the new course this year or next. Discrepancies in the answers to questions 7 and 9 indicate a certain level of sloppiness in the answers to this questionnaire.

Question no. 10

Respondent	Do you know the name of another lecturer who will be teaching your subject/s?	Comments
1.	Yes	
2.	No	
3.	Yes (only at Murdoch)	
4.	Yes	
5.	No	
6.	No	
7.	Yes	
8.	No	
9.	No; related subject	
10.	No	
11.	Yes	
12.		
13.	Yes	
14.	Yes	
15.	No. Not until I know which subjects I will be teaching	

Comment on question 10 responses:
This question was meant to raise awareness of the concept of the “network” and its importance in innovating a new course. It didn’t have a lot of meaning to those who didn’t know whether they would be teaching new subjects or not.

Question no. 11

Respondent	Do you know the telephone number of another lecturer who will be teaching your subject?	Comments (compare with answers to 10)
1.	Yes	Yes
2.	Yes	No
3.	Yes (only at Murdoch)	Yes (only at Murdoch)
4.	Yes	Yes
5.	No	No
6.	No	No
7.	Yes	Yes
8.	No	No
9.	Yes	No; related subject
10.	No	No
11.	Yes	Yes
12.		
13.	Yes	Yes
14.	Yes	Yes
15.	No. Not until I know which subjects I will be teaching	No. Not until I know which subjects I will be teaching

Comment on question 11 responses:
This question also was meant to raise awareness of the concept of the "network" and its importance in innovating a new course. The answers were almost identical to those from question 10.

Question no. 12

Respondent	Have you telephoned or talked to someone who will be teaching your subject/s to discuss your teaching plans?	Comments
1.	Yes	
2.	No	
3.	No	
4.	Yes	
5.	No	
6.	No	
7.	Yes No	
8.	last semester	
9.	Yes	
10.	No	
11.	No	
12.		
13.	No	
14.	Yes	
15.	No	

Comment on question 12 responses:
As above. Again it didn't have a lot of meaning to those who didn't know what they would be doing.

Question no. 13

Respondent	Have you had enough help to start planning your subject/s?	Comments
1.	Yes	
2.	No	
3.	Yes	
4.	Haven't begun yet - we only decided yesterday!	
5.	NA	
6.	Yes	
7.	No	
8.		
9.	Yes	
10.	NA	
11.	Yes	
12.		
13.	Yes	
14.	Yes	
15.	No	

Comment on question 13 responses:
Might be a hidden agenda in answer no 2! The question was meant more as an indication that someone cared for them than anything else.

Question no. 14

Respondent	Have you started planning your 17 week subject/s?	Comments
1.	In the holidays	isn't teaching new course this semester
2.	No; Keeping up with last semester is the name of the game here.	isn't teaching new course this semester
3.	No; Life is not easy in TAFE	
4.	No	isn't teaching new course this semester
5.	NA	isn't teaching new course this semester
6.	No	isn't teaching new course this semester
7.	Yes	
8.	Yes	isn't teaching new course this semester
9.	Yes	
10.	NA	isn't teaching new course this semester
11.	Yes	isn't teaching new course this semester
12.		isn't teaching new course this semester
13.	No	isn't teaching new course this semester
14.	Yes	isn't teaching new course this semester
15.	No	isn't teaching new course this semester

Comment on question 14 responses:
Most of these answers applied to other subjects not in the new course.

Question no. 15

Respondent	Have you finished planning your 17 week subject/s?	Comments
1.		
2.	No	
3.	No	
4.	No	
5.	NA	
6.	No	
7.	No	
8.	Almost	
9.	Nearly	
10.	NA	
11.	Yes	
12.		
13.	No	
14.	No	
15.	No	

Comment on question 15 responses:
Some of these answers applied to other subjects not in the new course.

Question no. 16

Respondent	If the project team is able to get further funding to prepare teaching materials of some kind for the new course, what sort of materials, or what sort of assistance, would you find most useful?	Comments
1.		
2.	Content materials eg videos, overheads etc. That is a teaching package. Models of how to assess are interesting & necessary perhaps but quality of delivery & what students really come for is addressed the former suggestion, ie, subject expertise material.	
3.	Task related packaged notes; task related packaged assessment; All prepared in self paced photocopiable loose leaf booklet.	
4.	Sorry, but I haven't got to this stage yet. Haven't read the syllabi yet (only just received them, just now).	
5.	Had I known of the info you required prior to start of semester I may have record more info for you. May pay to inform individual lecturers of what is required. I missed a lot, so I may have just missed out.	
6.		
7.	?	
8.	Outline of recommended practical work for field soils section of course.	
9.	Set of dictionaries Collection of workplace forms - time sheets, order forms, accident forms, etc.	
10.	1. Continuation of other noted subjects on delivery, assessment, other initiatives. 2. Maybe a teaching guide for each subject would be useful. 3. Continuation of the 'experienced" lecturer mentor role.	
11.	Texts, activity books, teaching aids.	
12.		
13.	Work booklets relevant to the subject outline. Financial assistance to Manjimup TAFE Centre for improve the standard of facilities.	

14.	The biggest problem faced by us in the regional centres is the part-time employment situation. Many of the lecturers are only in the Centre for a few hours per week and their numbers vary depending on the number of courses on offer and their involvement with the programme. I do not feel that this is an easy problem to deal with but if possible a visit to address all part-time lecturers and to bring them all up to date by someone who has a better understanding of all the current changes would be helpful. Thank you.	
15.	I'd like to see any relevant texts/course notes to go with the subject and to meet with other lecturers to discuss and list the kind of materials required, especially those lecturers with more experience than me (most of them!).	

Comment on question 16 responses:

The most useful information for forward planning. An edited version of these answers was used at the Midlands meeting and aroused considerable interest.

Appendix E8: Letter to developers

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Email McBeathC@educ.curtin.edu.au

20 August 1994

Christine Cooper
South Metro College of TAFE
Fremantle Campus
15A Grosvenor St
South Fremantle 6162

Dear Christine

The Certificate of Horticultural Skills dissemination project has come up with some money to assist with development teaching materials for the new course.

I have discussed this with Chris Oliver, yourself and Doug Monk, and have decided that this should be offered to lecturers who have taught, or are teaching, pilot subjects at Murdoch and Midlands. This plan assumes that a certain amount of development has already been done by pilot lecturers.

This semester you will be teaching Fieldwork - Nursery and you are the obvious choice for developing the teaching guide for this subject.

$200 will be paid on the completion of a basic teaching package consisting of

- timetable (no of hours, no of weeks)
- teaching notes
- projects, activities
- worksheets, exercises, games
- overhead transparencies
- assessment strategies
- list of available resources (reference books, videos, brochures, wall charts, pictures)

We discussed the possibility of developing a more complete package, but felt that this was enough to help other teachers get started and to guarantee a certain level of quality control in all colleges and centres next year.

I have offered to format the teaching guides so they will have consistency in page design and layout, and get the master copies to Chris in time to distribute them to other centres by early December. I hope it will be possible for you to let me have your subject on disk by 19 November.

The lecturers who are being asked to develop materials are as follows

Subject	Pilot Lecturers	Developer	Due Date
Horticultural Safety	Doug Monk, Midlands Alan Batt, Murdoch	Alan Batt	19 October
Soils and Watering	Doug Monk, Midlands Eric Crump, Murdoch	Eric Crump	19 October
Fieldwork - Gardening	Sue Leighton, Midlands Chris Oliver, Murdoch	Chris Oliver	19 October
Describing and Using Plants	Ian Reynolds, Murdoch Sue Leighton, Midlands	Ian Reynolds	19 November
Machinery and Tools	Sue Leighton, Midlands Ric Ullman, Murdoch	Ric Ullman	19 November
Writing Skills for Work	Jocelyn Shirley, Murdoch Karen Clulow, Midlands	Jocelyn Shirley	19 November
Fieldwork - Lawn and Turf	Doug Monk, Midlands	Doug Monk	19 November
Fieldwork - Nursery	Chris Cooper, Murdoch	Chris Cooper	19 November
Fieldwork - Production Horticulture		Simon Snook	Next year
Fieldwork - Landscaping			Next year

I outlined this plan to the Study Area Meeting at Midlands on 19 August.

Please talk to Doug Monk, Peter Graham or myself if you wish to discuss this project. Also discuss it with fellow developers, so that ideas can be shared and improved.

This is more or less the same letter as I sent to the other developers last week. Forgive me if it sounds rather formal.

Best wishes

Clare McBeath
Faculty of Education